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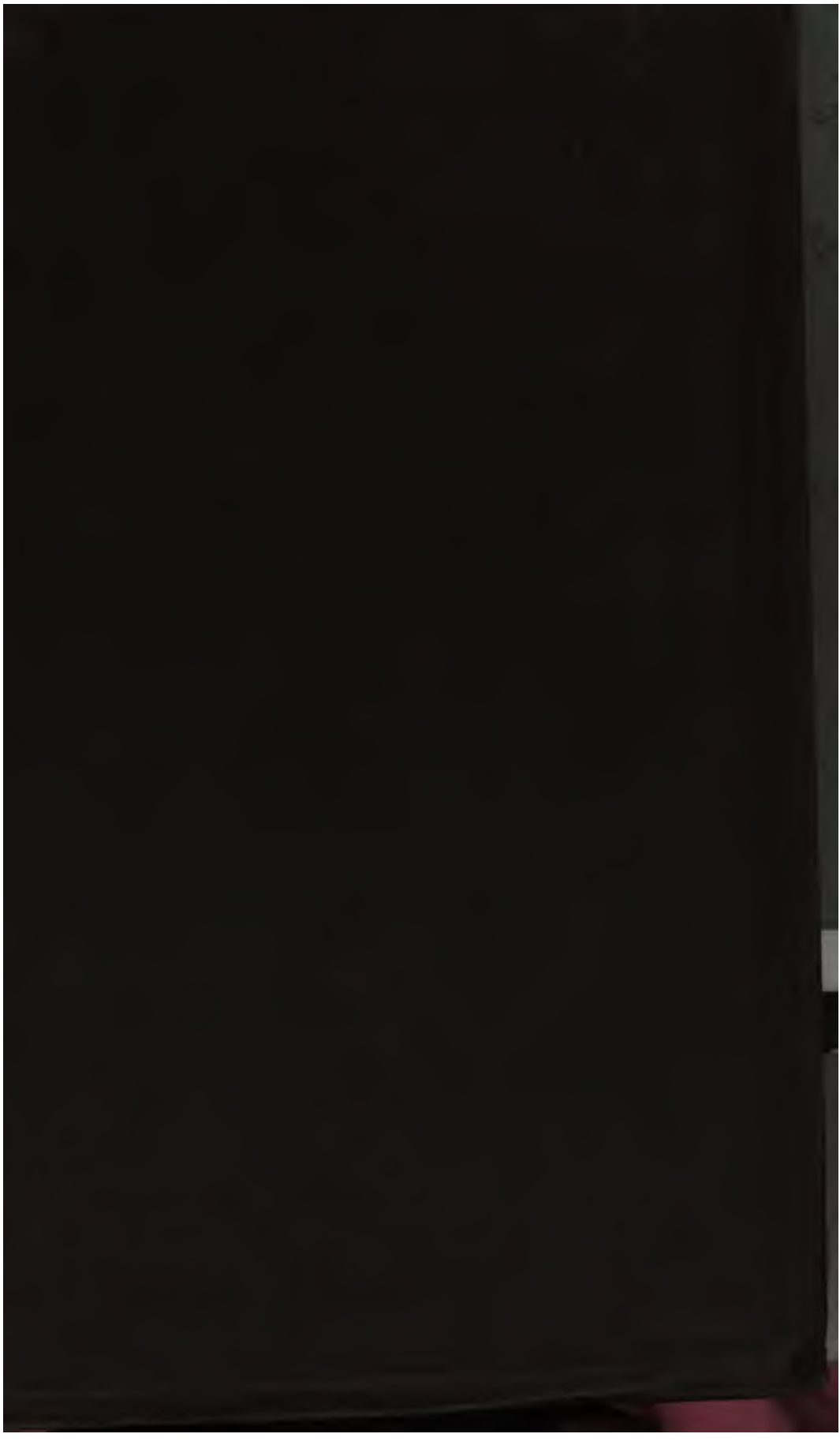

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MESSAGE

FROM THE

PRESIDENT OF THE UNITED STATES

TO THE

TWO HOUSES OF CONGRESS

AT THE COMMENCEMENT OF THE

FIRST SESSION OF THE FORTY-EIGHTH CONGRESS,

WITH THE

REPORTS OF THE HEADS OF DEPARTMENTS

AND

SELECTIONS FROM ACCOMPANYING DOCUMENTS.

EDITED BY

BEN: PERLEY POORE.

WASHINGTON:
GOVERNMENT PRINTING OFFICE.
1883.

Prepared in accordance with the provisions of the Revised Statutes, approved June 23, 1874.

SEC. 75. The Joint Committee on Public Printing shall appoint a competent person, who shall edit such portion of the documents accompanying the annual reports of the Departments as they may deem suitable for popular distribution, and prepare an alphabetical index thereto.

* * * * * * *

SEC. 196. The head of each Department, except the Department of Justice, shall furnish to the Congressional Printer copies of the documents usually accompanying his annual report on or before the first day of November in each year, and a copy of his annual report on or before the third Monday of November in each year.

* * * * * * *

SEC. 3798. Of the documents named in this section there shall be printed and bound, in addition to the usual number for Congress, the following numbers of copies, namely:

* * * * * * *

Second. Of the President's message, the annual reports of the Executive Departments, and the abridgment of accompanying documents, unless otherwise ordered by either house, ten thousand copies for the use of the members of the Senate and twenty-five thousand copies for the use of the members of the House of Representatives.

MESSAGE

OF

THE PRESIDENT OF THE UNITED STATES.

To the Congress of the United States:

At the threshold of your deliberations I congratulate you upon the favorable aspect of the domestic and foreign affairs of this Government.

Our relations with other countries continue to be upon a friendly footing.

With the Argentine Republic, Austria, Belgium, Brazil, Denmark, Hayti, Italy, Santo Domingo, and Sweden and Norway no incident has occurred which calls for special comment. The recent opening of new lines of telegraphic communication with Central America and Brazil permitted the interchange of messages of friendship with the governments of those countries.

During the year there have been perfected and proclaimed consular and commercial treaties with Serbia and a consular treaty with Roumania, thus extending our intercourse with the Danubian countries, while our Eastern relations have been put upon a wider basis by treaties with Corea and Madagascar. The new boundary-survey treaty with Mexico, a trades-mark convention and a supplementary treaty of extradition with Spain, and conventions extending the duration of the Franco-American Claims Commission have also been proclaimed.

Notice of the termination of the fisheries articles of the Treaty of Washington was duly given to the British Government, and the reciprocal privileges and exemptions of the treaty will accordingly cease on July 1, 1885. The fisheries industries, pursued by a numerous class of our citizens on the northern coasts, both of the Atlantic and Pacific Oceans, are worthy of the fostering care of Congress. Whenever brought into competition with the like industries of other countries, our fishermen, as well as our manufacturers of fishing appliances and preparers of fish products, have maintained a foremost place. I suggest that Congress create a commission to consider the general question of our rights in the fisheries and the means of opening to our citizens, under just and enduring conditions, the richly stocked fishing waters and sealing grounds of British North America.

Question has arisen touching the deportation to the United States from the British Islands, by governmental or municipal aid, of persons unable there to gain a living and equally a burden on the community here. Such of these persons as fall under the pauper class as defined by law have been sent back in accordance with the provisions of our statutes. Her Majesty's Government has insisted that precautions have been taken before shipment to prevent these objectionable visitors from coming hither without guarantee of support by their relatives in this country. The action of the British authorities in applying measures for relief has, however, in so many cases proved ineffectual, and especially so in certain recent instances of needy emigrants reaching our territory through Canada, that a revision of our legislation upon this subject may be deemed advisable. Correspondence relative to the Clayton-Bulwer Treaty has been continued and will be laid before Congress.

The legislation of France against the importation of prepared swine products from the United States has been repealed. That result is due no less to the friendly representations of this Government than to a growing conviction in France that the restriction was not demanded by any real danger to health.

Germany still prohibits the introduction of all swine products from America. I extended to the Imperial Government a friendly invitation to send experts to the United States to inquire whether the use of those products was dangerous to health. This invitation was declined. I have believed it of such importance however that the exact facts should be ascertained and promulgated that I have appointed a competent commission to make a thorough investigation of the subject. Its members have shown their public spirit by accepting their trust without pledge of compensation, but I trust that Congress will see in the national and international bearings of the matter a sufficient motive for providing at least for reimbursement of such expenses as they may necessarily incur.

The coronation of the Czar at Moscow afforded to this Government an occasion for testifying its continued friendship by sending a special envoy and a representative of the Navy to attend the ceremony.

While there have arisen during the year no grave questions affecting the status in the Russian Empire of American citizens of other faith than that held by the national church, this Government remains firm in its conviction that the rights of its citizens abroad should be in no wise affected by their religious belief.

It is understood that measures for the removal of the restrictions which now burden our trade with Cuba and Puerto Rico are under consideration by the Spanish Government.

The proximity of Cuba to the United States and the peculiar methods of administration which there prevail necessitate constant discussion

and appeal on our part from the proceedings of the insular authorities. I regret to say that the just protests of this Government have not as yet produced satisfactory results.

The commission appointed to decide certain claims of our citizens against the Spanish Government, after the recognition of a satisfactory rule as to the validity and force of naturalization in the United States, has finally adjourned. Some of its awards, though made more than two years ago, have not yet been paid. Their speedy payment is expected.

Claims to a large amount which were held by the late commission to be without its jurisdiction have been diplomatically presented to the Spanish Government. As the action of the colonial authorities, which has given rise to these claims, was admittedly illegal, full reparation for the injury sustained by our citizens should be no longer delayed.

The case of the Masonic has not yet reached a settlement. The Manila court has found that the proceedings of which this Government has complained were unauthorized, and it is hoped that the Government of Spain will not withhold the speedy reparation which its sense of justice should impel it to offer for the unusual severity and unjust action of its subordinate colonial officers in the case of this vessel.

The Helvetian Confederation has proposed the inauguration of a class of international treaties for the referment to arbitration of grave questions between nations. This Government has assented to the proposed negotiation of such a treaty with Switzerland.

Under the Treaty of Berlin, liberty of conscience and civil rights are assured to all strangers in Bulgaria. As the United States have no distinct conventional relations with that country and are not a party to the treaty, they should in my opinion maintain diplomatic representation at Sofia for the improvement of intercourse and the proper protection of the many American citizens who resort to that country as missionaries and teachers. I suggest that I be given authority to establish an agency and consulate-general at the Bulgarian capital.

The United States are now participating in a revision of the tariffs of the Ottoman Empire. They have assented to the application of a license tax to foreigners doing business in Turkey but have opposed the oppressive storage tax upon petroleum entering the ports of that country.

The Government of the Khedive has proposed that the authority of the mixed-judicial tribunals in Egypt be extended so as to cover citizens of the United States accused of crime, who are now triable before consular courts. This Government is not indisposed to accept the change, but believes that its terms should be submitted for criticism to the commission appointed to revise the whole subject.

At no time in our national history has there been more manifest need of close and lasting relations with a neighboring state than now exists with respect to Mexico. The rapid influx of our capital and en-

terprise into that country shows, by what has already been accomplished, the vast reciprocal advantages which must attend the progress of its internal development. The treaty of commerce and navigation of 1848 has been terminated by the Mexican Government, and in the absence of conventional engagements the rights of our citizens in Mexico now depend upon the domestic statutes of that Republic. There have been instances of harsh enforcement of the laws against our vessels and citizens in Mexico, and of denial of the diplomatic resort for their protection. The initial step toward a better understanding has been taken in the negotiation by the commission authorized by Congress of a treaty which is still before the Senate awaiting its approval.

The provisions for the reciprocal crossing of the frontier by the troops in pursuit of hostile Indians have been prolonged for another year. The operations of the forces of both Governments against these savages have been successful, and several of their most dangerous bands have been captured or dispersed by the skill and valor of United States and Mexican soldiers fighting in a common cause.

The convention for the resurvey of the boundary from the Rio Grande to the Pacific, having been ratified and exchanged, the preliminary reconnaissance therein stipulated has been effected. It now rests with Congress to make provision for completing the survey and relocating the boundary monuments.

A convention was signed with Mexico on July 13, 1882, providing for the rehearing of the cases of Benjamin Weil and the Abra Silver Mining Company, in whose favor awards were made by the late American and Mexican Claims Commission. That convention still awaits the consent of the Senate. Meanwhile because of those charges of fraudulent awards which have made a new commission necessary, the Executive has directed the suspension of payments of the distributive quota received from Mexico.

Our geographical proximity to Central America and our political and commercial relations with the states of that country justify, in my judgment, such a material increase of our consular corps as will place at each capital a consul-general.

The contest between Bolivia, Chile, and Peru has passed from the stage of strategic hostilities to that of negotiation, in which the counsels of this Government have been exercised. The demands of Chile for absolute cession of territory have been maintained and accepted by the party of General Iglesias to the extent of concluding a treaty of peace with the Government of Chile in general conformity with the terms of the protocol signed in May last between the Chilean commander and General Iglesias. As a result of the conclusion of this treaty, General Iglesias has been formally recognized by Chile as President of Peru, and his government installed at Lima which has been evacuated by the Chileans. A call has been issued by General Iglesias for a representative assembly, to be elected on the 13th of January, and to

meet at Lima on the 1st of March next. Meanwhile the provisional government of General Iglesias has applied for recognition to the principal powers of America and Europe. When the will of the Peruvian people shall be manifested I shall not hesitate to recognize the government approved by them.

Diplomatic and naval representatives of this Government attended at Caracas the centennial celebration of the birth of the illustrious Bolivar. At the same time the inauguration of the statue of Washington in the Venezuelan capital testified to the veneration in which his memory is there held.

Congress at its last session authorized the Executive to propose to Venezuela a reopening of the awards of the Mixed Commission of Caracas. The departure from this country of the Venezuelan minister has delayed the opening of negotiations for reviving the commission. This Government holds that until the establishment of a treaty upon this subject the Venezuelan Government must continue to make the payments provided for in the convention of 1866.

There is ground for believing that the dispute growing out of the unpaid obligations due from Venezuela to France will be satisfactorily adjusted. The French cabinet has proposed a basis of settlement which meets my approval, but as it involves a recasting of the annual quotas of the foreign debt it has been deemed advisable to submit the proposal to the judgment of the cabinets of Berlin, Copenhagen, The Hague, London, and Madrid.

At the recent coronation of His Majesty King Kalakaua this Government was represented both diplomatically and by the formal visit of a vessel of war.

The question of terminating or modifying the existing reciprocity treaty with Hawaii is now before Congress. I am convinced that the charges of abuses and frauds under that treaty have been exaggerated, and I renew the suggestion of last year's message that the treaty be modified wherever its provisions have proved onerous to legitimate trade between the two countries. I am not disposed to favor the entire cessation of the treaty relations which have fostered good-will between the countries and contributed toward the equality of Hawaii in the family of nations.

In pursuance of the policy declared by this Government of extending our intercourse with the Eastern nations, legations have during the past year been established in Persia, Siam, and Corea. It is probable that permanent missions of those countries will ere long be maintained in the United States. A special embassy from Siam is now on its way hither.

Treaty relations with Corea were perfected by the exchange at Seôul, on the 19th of May last, of the ratifications of the lately concluded convention, and envoys from the King of Tah Chosun have visited this country and received a cordial welcome. Corea, as yet unacquainted

with the methods of Western civilization, now invites the attention of those interested in the advancement of our foreign trade, as it needs the implements and products which the United States are ready to supply. We seek no monopoly of its commerce and no advantages over other nations, but as the Chosunese, in reaching for a higher civilization, have confided in this Republic, we cannot regard with indifference any encroachment on their rights.

China, by the payment of a money indemnity, has settled certain of the long-pending claims of our citizens, and I have strong hopes that the remainder will soon be adjusted.

Questions have arisen touching the rights of American and other foreign manufacturers in China under the provisions of treaties which permit aliens to exercise their industries in that country. On this specific point our own treaty is silent, but under the operation of the most-favored-nation clause, we have like privileges with those of other powers. While it is the duty of the Government to see that our citizens have the full enjoyment of every benefit secured by treaty, I doubt the expediency of leading in a movement to constrain China to admit an interpretation which we have only an indirect treaty right to exact. The transference to China of American capital for the employment there of Chinese labor would in effect inaugurate a competition for the control of markets now supplied by our home industries.

There is good reason to believe that the law restricting the immigration of Chinese has been violated, intentionally or otherwise, by the officials of China upon whom is devolved the duty of certifying that the immigrants belong to the excepted classes.

Measures have been taken to ascertain the facts incident to this supposed infraction, and it is believed that the Government of China will co-operate with the United States in securing the faithful observance of the law.

The same considerations which prompted Congress at its last session to return to Japan the Simonoseki indemnity seems to me to require at its hands like action in respect to the Canton indemnity fund, now amounting to $300,000.

The question of the general revision of the foreign treaties of Japan has been considered in an international conference held at Tokio, but without definite result as yet. This Government is disposed to concede the requests of Japan to determine its own tariff duties, to provide such proper judicial tribunals as may commend themselves to the Western Powers for the trial of causes to which foreigners are parties, and to assimilate the terms and duration of its treaties to those of other civilized States.

Through our ministers at London and at Monrovia, this Government has endeavored to aid Liberia in its differences with Great Britain touching the northwestern boundary of that republic. There is a pros-

pect of adjustment of the dispute by the adoption of the Mannah River as the line. This arrangement is a compromise of the conflicting territorial claims, and takes from Liberia no country over which it has maintained effective jurisdiction.

The rich and populous valley of the Congo is being opened to commerce by a society called the International African Association, of which the King of the Belgians is the president and a citizen of the United States the chief executive officer. Large tracts of territory have been ceded to the association by native chiefs, roads have been opened, steamboats placed on the river, and the *nuclei* of states established at twenty-two stations under one flag which offers freedom to commerce and prohibits the slave trade. The objects of the society are philanthropic. It does not aim at permanent political control but seeks the neutrality of the valley. The United States cannot be indifferent to this work nor to the interests of their citizens involved in it. It may become advisable for us to co-operate with other commercial powers in promoting the rights of trade and residence in the Congo Valley free from the interference or political control of any one nation.

In view of the frequency of invitations from foreign Governments to participate in social and scientific congresses for the discussion of important matters of general concern, I repeat the suggestion of my last message, that provision be made for the exercise of discretionary power by the Executive in appointing delegates to such convocations. Able specialists are ready to serve the national interests in such capacity without personal profit or other compensation than the defrayment of expenses actually incurred, and this a comparatively small annual appropriation would suffice to meet.

I have alluded in my previous messages to the injurious and vexatious restrictions suffered by our trade in the Spanish West Indies. Brazil, whose natural outlet for its great national staple, coffee, is in and through the United States, imposes a heavy export duty upon that product. Our petroleum exports are hampered in Turkey and in other Eastern ports by restrictions as to storage and by onerous taxation. For these mischiefs adequate relief is not always afforded by reciprocity treaties like that with Hawaii or that lately negotiated with Mexico and now awaiting the action of the Senate. Is it not advisable to provide some measure of equitable retaliation in our relations with governments which discriminate against our own? If, for example, the Executive were empowered to apply to Spanish vessels and cargoes from Cuba and Puerto Rico the same rules of treatment and scale of penalties for technical faults which are applied to our vessels and cargoes in the Antilles, a resort to that course might not be barren of good results.

The report of the Secretary of the Treasury gives a full and interesting exhibit of the financial condition of the country.

It shows that the ordinary revenues from all sources for the fiscal year ended June 30, 1883, amounted to		$398,287,581 95
Whereof there was received—		
From customs	$214,706,496 93	
From internal revenue	144,720,368 98	
From sales of public lands	7,955,864 42	
From tax on circulation and deposits of national banks	9,111,008 85	
From profits on coinage, bullion deposits, and assays	4,460,205 17	
From other sources	17,333,637 60	
Total		398,287,581 95
For the same period the ordinary expenditures were:		
For civil expenses		$22,343,285 76
For foreign intercourse		2,419,275 24
For Indians		7,362,590 34
For pensions		66,012,573 64
For the military establishment, including river and harbor improvements and arsenals		48,911,382 93
For the naval establishment, including vessels, machinery, and improvements at navy-yards		15,283,437 17
For miscellaneous expenditures, including public buildings, light-houses, and collecting the revenue		40,098,432 73
For expenditures on account of the District of Columbia		3,817,028 48
For interest on the public debt		59,160,131 25
Total		265,408,137 54
Leaving a surplus revenue of		132,879,444 41
Which, with an amount drawn from the cash balance in the Treasury of		1,299,312 55
Making		134,178,756 96
Was applied to the redemption—		
Of bonds for the sinking-fund		44,850,700 00
Of fractional currency for the sinking-fund		46,556 96
Of funded loan of 1881, continued at 3½ per cent		65,380,250 00
Of loan of July and August, 1861, continued at 3½ per cent		20,594,600 00
Of funded loan of 1907		1,418,850 00
Of funded loan of 1881		719,150 00
Of loan of February, 1861		18,000 00
Of loan of July and August, 1861		266,600 00
Of loan of March, 1863		116,850 00
Of loan of July, 1882		47,650 00
Of five-twenties of 1862		10,300 00
Of five-twenties of 1864		7,050 00
Of five-twenties of 1865		9,600 00
Of ten-forties of 1864		133,550 00
Of consols of 1865		40,800 00
Of consols of 1867		235,700 00
Of consols of 1868		154,650 00
Of Oregon-war debt		5,450 00
Of refunding certificates		109,150 00
Of old demand, compound-interest, and other notes		13,300 00
Total		134,178,756 96

The revenue for the present fiscal year, actual and estimated, is as follows:

Source.	For the quarter ended September 30, 1883.	For the remaining three quarters of the year.
	Actual.	Estimated.
From customs	$57,402,975 67	$137,597,024 33
From internal revenue	29,662,078 60	90,337,921 40
From sales of public lands	2,932,635 17	5,067,364 83
From tax on circulation and deposits of national banks	1,557,800 88	1,542,199 12
From repayment of interest and sinking-fund, Pacific railway companies	521,059 51	1,478,940 49
From customs fees, fines, penalties, &c	298,696 78	901,303 22
From fees—consular, letters-patent, and lands	863,209,80	2,436,790 20
From proceeds of sales of Government property	112,562 23	167,437 77
From profits on coinage, &c	950,229 46	3,149,770 54
From deposits for surveying public lands	172,461 31	327,538 69
From revenues of the District of Columbia	256,017 99	1,643,982 01
From miscellaneous sources	1,237,189 63	2,382,810 37
Total receipts	95,966,917 03	247,033,082 97

The actual and estimated expenses for the same period are:

Object.	For the quarter ended September 30, 1883.	For the remaining three quarters of the year.
	Actual.	Estimated.
For civil and miscellaneous expenses, including public buildings, light-houses, and collecting the revenue	$15,385,799 42	$51,114,200 58
For Indians	2,623,390 54	4,126,609 46
For pensions	16,285,261 98	53,714,738 02
For military establishment, including fortifications, river and harbor improvements, and arsenals	13,512,204 33	26,487,795 67
For naval establishment, including vessels and machinery, and improvements at navy-yards	4,199,299 69	12,300,700 31
For expenditures on account of the District of Columbia	1,138,836 41	2,611,163 59
For interest on the public debt	14,797,297 96	39,702,702 04
Total ordinary expenditures	67,942,090 33	190,057,909 67

Total receipts, actual and estimated	$343,000,000	00
Total expenditures, actual and estimated	258,000,000	00
	85,000,000	00
Estimated amount due the sinking-fund	45,816,741	07
Leaving a balance of	39,183,258	93

If the revenue for the fiscal year which will end on June 30, 1885, be estimated upon the basis of existing laws, the Secretary is of the opinion that for that year the receipts will exceed by $60,000,000 the ordinary expenditures including the amount devoted to the sinking-fund.

Hitherto the surplus as rapidly as it has accumulated has been devoted to the reduction of the national debt.

As a result the only bonds now outstanding which are redeemable at the pleasure of the Government are the three per cents, amounting to about $305,000,000.

The four and one-half per cents, amounting to $250,000,000, and the $737,000,000 four per cents are not payable until 1891 and 1907, respectively.

If the surplus shall hereafter be as large as the Treasury estimates now indicate, the three per cent. bonds may all be redeemed at least four years before any of the four and one-half per cents can be called in. The latter at the same rate of accumulation of surplus can be paid at maturity and the moneys requisite for the redemption of the four per cents will be in the Treasury many years before those obligations become payable.

There are cogent reasons however why the national indebtedness should not be thus rapidly extinguished. Chief among them is the fact that only by excessive taxation is such rapidity attainable.

In a communication to the Congress at its last session I recommended that all excise taxes be abolished except those relating to distilled spirits and that substantial reductions be also made in the revenues from customs. A statute has since been enacted by which the annual tax and tariff receipts of the Government have been cut down to the extent of at least fifty or sixty millions of dollars.

While I have no doubt that still further reductions may be wisely made I do not advise the adoption at this session of any measures for large diminution of the national revenues. The results of the legislation of the last session of the Congress have not as yet become sufficiently apparent to justify any radical revision or sweeping modifications of existing law.

In the interval which must elapse before the effects of the act of March 3, 1883 can be definitely ascertained a portion at least of the surplus revenues may be wisely applied to the long-neglected duty of rehabilitating our Navy and providing coast defenses for the protection of our harbors. This is a matter to which I shall again advert.

Immediately associated with the financial subject just discussed is the important question what legislation is needed regarding the national currency.

The aggregate amount of bonds now on deposit in the Treasury to support the national-bank circulation is about $350,000,000. Nearly $200,000,000 of this amount consists of three per cents, which, as already stated, are payable at the pleasure of the Government and are likely to be called in within less than four years unless meantime the surplus revenues shall be diminished.

The probable effect of such an extensive retirement of the securities which are the basis of the national-bank circulation would be such a contraction of the volume of the currency as to produce grave commercial embarrassments.

How can this danger be obviated? The most effectual plan, and one whose adoption at the earliest practicable opportunity I shall heartily approve has already been indicated.

If the revenues of the next four years shall be kept substantially commensurate with the expenses, the volume of circulation will not be likely to suffer any material disturbance.

But if, on the other hand, there shall be great delay in reducing taxation, it will become necessary either to substitute some other form of currency in place of the national-bank notes or to make important changes in the laws by which their circulation is now controlled.

In my judgment the latter course is far preferable. I commend to your attention the very interesting and thoughtful suggestions upon this subject which appear in the Secretary's report.

The objections which he urges against the acceptance of any other securities than the obligations of the Government itself as a foundation for national-bank circulation seem to me insuperable.

For averting the threatened contraction two courses have been suggested, either of which is probably feasible. One is the issuance of new bonds, having many years to run, bearing a low rate of interest, and exchangeable upon specified terms for those now outstanding. The other course, which commends itself to my own judgment as the better, is the enactment of a law repealing the tax on circulation and permitting the banks to issue notes for an amount equal to 90 per cent. of the market value instead of as now the face value of their deposited bonds. I agree with the Secretary in the belief that the adoption of this plan would afford the necessary relief.

The trade-dollar was coined for the purpose of traffic in countries where silver passed at its value as ascertained by its weight and fineness. It never had a legal-tender quality. Large numbers of these coins entered, however, into the volume of our currency. By common consent their circulation in domestic trade has now ceased, and they have thus become a disturbing element. They should not be longer

permitted to embarrass our currency system. I recommend that provision be made for their reception by the Treasury and the mints, as bullion, at a small percentage above the current market price of silver of like fineness.

The Secretary of the Treasury advises a consolidation of certain of the customs districts of the country, and suggests that the President be vested with such power in relation thereto as is now given him in respect to collectors of internal revenue by section 3141 of the Revised Statutes. The statistics upon this subject which are contained in his report furnish of themselves a strong argument in defense of his views.

At the adjournment of Congress the number of internal-revenue collection districts was 126. By Executive order dated June 25, 1883, I directed that certain of these districts be consolidated. The result has been a reduction of one-third their number, which at present is but 83.

From the report of the Secretary of War it will be seen that in only a single instance has there been any disturbance of the quiet condition of our Indian tribes. A raid from Mexico into Arizona was made in March last by a small party of Indians, which was pursued by General Crook into the mountain regions from which it had come. It is confidently hoped that serious outbreaks will not again occur and that the Indian tribes which have for so many years disturbed the West will hereafter remain in peaceable submission.

I again call your attention to the present condition of our extended seacoast, upon which are so many large cities whose wealth and importance to the country would in time of war invite attack from modern armored ships against which our existing defensive works could give no adequate protection. Those works were built before the introduction of modern heavy rifled guns into maritime warfare, and if they are not put in an efficient condition we may easily be subjected to humiliation by a hostile power greatly inferior to ourselves. As germane to this subject, I call your attention to the importance of perfecting our submarine-torpedo defenses. The board authorized by the last Congress to report upon the method which should be adopted for the manufacture of heavy ordnance adapted to modern warfare has visited the principal iron and steel works in this country and in Europe. It is hoped that its report will soon be made, and that Congress will thereupon be disposed to provide suitable facilities and plant for the manufacture of such guns as are now imperatively needed.

On several occasions during the past year officers of the Army have at the request of the State authorities visited their militia encampments for inspection of the troops. From the reports of these officers I am induced to believe that the encouragement of the State militia organizations by the national Government would be followed by very gratifying results, and would afford it in sudden emergencies the aid of

a large body of volunteers educated in the performance of military duties.

The Secretary of the Navy reports that under the authority of the acts of August 5, 1882, and March 3, 1883, the work of strengthening our Navy by the construction of modern vessels has been auspiciously begun. Three cruisers are in process of construction—the Chicago, of 4,500 tons displacement, and the Boston and Atlanta, each of 2,500 tons. They are to be built of steel, with the tensile strength and ductility prescribed by law, and in the combination of speed, endurance, and armament are expected to compare favorably with the best unarmored war vessels of other nations. A fourth vessel, the Dolphin, is to be constructed of similar material and is intended to serve as a fleet dispatch boat.

The double-turreted monitors Puritan, Amphitrite, and Terror have been launched on the Delaware River and a contract has been made for the supply of their machinery. A similar monitor, the Monadnock, has been launched in California.

The Naval Advisory Board and the Secretary recommend the completion of the monitors, the construction of four gunboats, and also of three additional steel vessels like the Chicago, Boston, and Dolphin.

As an important measure of national defense the Secretary urges also the immediate creation of an interior coast-line of water-ways across the Peninsula of Florida, along the coast from Florida to Hampton Roads, between the Chesapeake Bay and the Delaware River, and through Cape Cod.

I feel bound to impress upon the attention of Congress the necessity of continued progress in the reconstruction of the Navy. The condition of the public treasury, as I have already intimated, makes the present an auspicious time for putting this branch of the service in a state of efficiency.

It is no part of our policy to create and maintain a Navy able to cope with that of the other great powers of the world.

We have no wish for foreign conquest, and the peace which we have long enjoyed is in no seeming danger of interruption.

But that our naval strength should be made adequate for the defense of our harbors, the protection of our commercial interests, and the maintenance of our national honor, is a proposition from which no patriotic citizen can withhold his assent.

The report of the Postmaster-General contains a gratifying exhibit of the condition and prospects of the interesting branch of the public service committed to his care.

It appears that on June 30, 1883, the whole number of post-offices was 47,863, of which 1,632 were established during the previous fiscal year. The number of offices operating under the system of free delivery was 154.

At these latter offices the postage on local matter amounted to $4,195,230.52, a sum exceeding by $1,021,894.01 the entire cost of the carrier service of the country.

The rate of postage on drop letters passing through these offices is now fixed by law at two cents per half ounce or fraction thereof. In offices where the carrier system has not been established the rate is only half as large.

It will be remembered that in 1863, when free delivery was first established by law, the uniform single-rate postage upon local letters was one cent; and so it remained until 1872, when in those cities where carrier service was established it was increased in order to defray the expense of such service.

It seems to me that the old rate may now with propriety be restored, and that, too, even at the risk of diminishing for a time, at least, the receipts from postage upon local letters.

I can see no reason why that particular class of mail matter should be held accountable for the entire cost of not only its own collection and delivery but the collection and delivery of all other classes; and I am confident, after full consideration of the subject, that the reduction of rate would be followed by such a growing accession of business as to occasion but slight and temporary loss to the revenues of the Post-Office.

The Postmaster-General devotes much of his report to the consideration, in its various aspects, of the relations of the Government to the telegraph. Such reflection as I have been able to give to this subject since my last annual message has not led me to change the views which I there expressed in dissenting from the recommendation of the then Postmaster-General that the Government assume the same control over the telegraph which it has always exercised over the mail.

Admitting that its authority in the premises is as ample as has ever been claimed for it, it would not, in my judgment, be a wise use of that authority to purchase or assume the control of existing telegraph lines, or to construct others with a view of entering into general competition with private enterprise.

The objections which may be justly urged against either of those projects, and indeed against any system which would require an enormous increase in the civil-service list, do not, however, apply to some of the plans which have lately provoked public comment and discussion. It has been claimed, for example, that Congress might wisely authorize the Postmaster-General to contract with some private persons or corporation for the transmission of messages, or of a certain class of messages, at specified rates and under government supervision. Various such schemes, of the same general nature but widely differing in their special characteristics, have been suggested in the public prints, and the arguments by which they have been supported and opposed have doubtless attracted your attention.

It is likely that the whole subject will be considered by you at the present session.

In the nature of things it involves so many questions of detail that your deliberations would probably be aided slightly, if at all, by any particular suggestions which I might now submit.

I avow my belief, however, that the Government should be authorized by law to exercise some sort of supervision over interstate telegraphic communication, and I express the hope that for attaining that end some measure may be devised which will receive your approbation.

The Attorney-General criticises in his report the provisions of existing law fixing the fees of jurors and witnesses in the Federal courts. These provisions are chiefly contained in the act of February 26, 1853, though some of them were introduced into that act from statutes which had been passed many years previous. It is manifest that such compensation as might, when these laws were enacted, have been just and reasonable would in many instances be justly regarded at the present day as inadequate. I concur with the Attorney-General in the belief that the statutes should be revised by which these fees are regulated.

So, too, should the laws which regulate the compensation of district attorneys and marshals. They should be paid wholly by salaries, instead of in part by fees, as is now the case.

The change would prove to be a measure of economy, and would discourage the institution of needless and oppressive legal proceedings, which, it is to be feared, have in some instances been conducted for the mere sake of personal gain.

Much interesting and varied information is contained in the report of the Secretary of the Interior.

I particularly call your attention to his presentation of certain phases of the Indian question, to his recommendations for the repeal of the pre-emption and timber-culture acts, and for more stringent legislation to prevent frauds under the pension laws. The statutes which prescribe the definitions and punishments of crimes relating to pensions could doubtless be made more effective by certain amendments and additions which are pointed out in the Secretary's report.

I have previously referred to the alarming state of illiteracy in certain portions of the country, and again submit for the consideration of Congress whether some Federal aid should not be extended to public primary education wherever adequate provision therefor has not already been made.

The Utah Commission has submitted to the Secretary of the Interior its second annual report. As a result of its labors in supervising the recent election in that Territory, pursuant to the act of March 22, 1882, it appears that persons by that act disqualified, to the number of about 12,000, were excluded from the polls. This fact, however, affords little cause for congratulation, and I fear that it is far from indicating any real and substantial progress toward the extirpation of polygamy. All

the members-elect of the legislature are Mormons. There is grave reason to believe that they are in sympathy with the practices that this Government is seeking to suppress, and that its efforts in that regard will be more likely to encounter their opposition than to receive their encouragement and support. Even if this view should happily be erroneous, the law under which the Commissioners have been acting should be made more effective by the incorporation of some such stringent amendments as they recommend, and as were included in bill No. 2238 on the Calendar of the Senate at its last session.

I am convinced, however, that polygamy has become so strongly intrenched in the Territory of Utah that it is profitless to attack it with any but the stoutest weapons which constitutional legislation can fashion. I favor therefore the repeal of the act upon which the existing government depends, the assumption by the national legislature of the entire political control of the Territory, and the establishment of a commission with such powers and duties as shall be delegated to it by law.

The Department of Agriculture is accomplishing much in the direction of the agricultural development of the country, and the report of the Commissioner giving the results of his investigations and experiments will be found interesting and valuable.

At his instance a convention of those interested in the cattle industry of the country was lately held at Chicago. The prevalence of pleuropneumonia and other contagious diseases of animals was one of the chief topics of discussion. A committee of the convention will invite your co-operation in investigating the causes of these diseases and providing methods for their prevention and cure.

I trust that Congress will not fail at its present session to put Alaska under the protection of law. Its people have repeatedly remonstrated against our neglect to afford them the maintenance and protection expressly guaranteed by the terms of the treaty whereby that Territory was ceded to the United States. For sixteen years they have pleaded in vain for that which they should have received without the asking.

They have no law for the collection of debts, the support of education, the conveyance of property, the administration of estates or the enforcement of contracts; none indeed for the punishment of criminals except such as offend against certain customs, commerce and navigation acts.

The resources of Alaska, especially in fur, mines, and lumber, are considerable in extent and capable of large development, while its geographical situation is one of political and commercial importance.

The promptings of interest, therefore, as well as considerations of honor and good faith, demand the immediate establishment of civil government in that Territory.

Complaints have lately been numerous and urgent that certain corporations, controlling in whole or in part the facilities for the interstate carriage of persons and merchandise over the great railroads of the

country, have resorted in their dealings with the public to divers measures unjust and oppressive in their character.

In some instances the State governments have attacked and suppressed these evils, but in others they have been unable to afford adequate relief because of the jurisdictional limitations which are imposed upon them by the Federal Constitution.

The question how far the National Government may lawfully interfere in the premises, and what, if any, supervision or control it ought to exercise, is one which merits your careful consideration.

While we cannot fail to recognize the importance of the vast railway systems of the country and their great and beneficent influences upon the development of our material wealth, we should, on the other hand, remember that no individual and no corporation ought to be invested with absolute power over the interest of any other citizen or class of citizens. The right of these railway corporations to a fair and profitable return upon their investments, and to reasonable freedom in their regulations, must be recognized; but it seems only just that, so far as its constitutional authority will permit, Congress should protect the people at large in their interstate traffic against acts of injustice which the State governments are powerless to prevent.

In my last annual message I called attention to the necessity of protecting by suitable legislation the forests situated upon the public domain. In many portions of the West the pursuit of general agriculture is only made practicable by resort to irrigation, while successful irrigation would itself be impossible without the aid afforded by forests in contributing to the regularity and constancy of the supply of water.

During the past year severe suffering and great loss of property have been occasioned by profuse floods followed by periods of unusually low water in many of the great rivers of the country.

These irregularities were in great measure caused by the removal from about the sources of the streams in question of the timber by which the water supply had been nourished and protected.

The preservation of such portions of the forests on the national domain as essentially contribute to the equable flow of important watercourses is of the highest consequence.

Important tributaries of the Missouri, the Columbia, and the Saskatchewan rise in the mountain region of Montana, near the northern boundary of the United States, between the Blackfeet and Flathead Indian reservations. This region is unsuitable for settlement, but upon the rivers which flow from it depends the future agricultural development of a vast tract of country. The attention of Congress is called to the necessity of withdrawing from public sale this part of the public domain and establishing there a forest preserve.

The industrial exhibitions which have been held in the United States during the present year attracted attention in many foreign countries where the announcement of those enterprises had been made public

through the foreign agencies of this Government. The Industrial Exhibition at Boston and the Southern Exposition at Louisville were largely attended by the exhibitors of foreign countries, notwithstanding the absence of any professed national character in those undertakings.

The Centennial Exposition to be held next year at New Orleans, in commemoration of the centenary of the first shipment of cotton from a port of the United States bids fair to meet with like gratifying success. Under the act of Congress of the 10th of February, 1883, declaring that exposition to be national and international in its character, all foreign governments with which the United States maintain relations have been invited to participate.

The promoters of this important undertaking have already received assurances of the lively interest which it has excited abroad.

The report of the Commissioners of the District of Columbia is herewith transmitted. I ask for it your careful attention, especially for those portions which relate to assessments, arrears of taxes, and increase of water supply.

The Commissioners who were appointed under the act of January 16, 1883, entitled "An act to regulate and improve the civil service of the United States," entered promptly upon the discharge of their duties.

A series of rules, framed in accordance with the spirit of the statute, was approved and promulgated by the President.

In some particulars wherein they seemed defective those rules were subsequently amended. It will be perceived that they discountenance any political or religious tests for admission to those offices of the public service to which the statute relates.

The act is limited in its original application to the classified clerkships in the several Executive Departments at Washington (numbering about 5,600) and to similar positions in customs districts and post-offices where as many as fifty persons are employed.

A classification of these positions analogous to that existing in the Washington offices was duly made before the law went into effect.

Eleven customs districts and twenty-three post-offices were thus brought under the immediate operation of the statute.

The annual report of the Civil Service Commission which will soon be submitted to Congress will doubtless afford the means of a more definite judgment than I am now prepared to express as to the merits of the new system. I am persuaded that its effects have thus far proved beneficial. Its practical methods appear to be adequate for the ends proposed, and there has been no serious difficulty in carrying them into effect. Since the 16th of July last no person, so far as I am aware, has been appointed to the public service in the classified portions thereof at any of the Departments, or at any of the post-offices and customs districts above named, except those certified by the Commission to be the most competent on the basis of the examinations held in conformity to the rules.

At the time when the present Executive entered upon his office his death, removal, resignation, or inability to discharge his duties would have left the Government without a constitutional head.

It is possible of course that a similar contingency may again arise unless the wisdom of Congress shall provide against its recurrence.

The Senate at its last session, after full consideration, passed an act relating to this subject which will now, I trust, commend itself to the approval of both houses of Congress.

The clause of the Constitution upon which must depend any law regulating the Presidential succession presents also for solution other questions of paramount importance.

These questions relate to the proper interpretation of the phrase "inability to discharge the powers and duties of said office," our organic law providing that, when the President shall suffer from such inability, the Presidential office shall devolve upon the Vice-President, who must himself under like circumstances give place to such officer as Congress may by law appoint to act as President.

I need not here set forth the numerous and interesting inquiries which are suggested by these words of the Constitution. They were fully stated in my first communication to Congress and have since been the subject of frequent deliberations in that body.

It is greatly to be hoped that these momentous questions will find speedy solution, lest emergencies may arise when longer delay will be impossible, and any determination, albeit the wisest, may furnish cause for anxiety and alarm.

For the reasons fully stated in my last annual message I repeat my recommendation that Congress propose an amendment to that provision of the Constitution which prescribes the formalities for the enactment of laws, whereby, in respect to bills for the appropriation of public moneys, the Executive may be enabled, while giving his approval to particular items, to interpose his veto as to such others as do not commend themselves to his judgment.

The Fourteenth Amendment of the Constitution confers the rights of citizenship upon all persons born or naturalized in the United States and subject to the jurisdiction thereof. It was the special purpose of this amendment to insure to members of the colored race the full enjoyment of civil and political rights.

Certain statutory provisions intended to secure the enforcement of those rights have been recently declared unconstitutional by the Supreme Court.

Any legislation whereby Congress may lawfully supplement the guaranties which the Constitution affords for the equal enjoyment by all the citizens of the United States of every right, privilege, and immunity of citizenship will receive my unhesitating approval.

CHESTER A. ARTHUR.

WASHINGTON,
December 4, 1883.

REPORT

OF

THE SECRETARY OF THE TREASURY.

TREASURY DEPARTMENT,
Washington, D. C., December 3, 1883.

SIR: I have the honor to submit the following report:

The ordinary revenues from all sources for the fiscal year ended June 30, 1883, were:

From customs	$214,706,496 93
From internal revenue	144,720,368 98
From sales of public lands	7,955,864 42
From tax on circulation and deposits of national banks	9,111,008 85
From profits on coinage, bullion deposits, and assays	4,460,205 17
From customs fees, fines, penalties, &c	1,436,236 34
From fees—consular, letters-patent, and lands	3,322,361 64
From repayment of interest by Pacific railway companies	1,556,866 90
From sinking-fund for Pacific railway companies	1,322,103 11
From deposits by individuals for surveying public lands	1,221,611 76
From proceeds of sales of Government property	285,055 02
From proceeds of sale of post-office property in New York city	648,694 82
From Indian trust-funds	121,000 00
From donations towards liquidating the public debt	964,426 87
From Japanese indemnity fund	1,839,533 99
From immigrant fund	231,476 50
From revenues of the District of Columbia	1,970,938 47
From miscellaneous sources	2,413,332 18
Total ordinary receipts	398,287,581 95

The ordinary expenditures for the same period were:

For civil expenses	$22,343,285 76
For foreign intercourse	2,419,275 24
For Indians	7,362,590 34
For pensions	66,012,573 64

For the military establishment, including river and harbor improvements and arsenals	$48,911,382 93
For the naval establishment, including vessels, machinery, and improvements at navy-yards	15,283,437 17
For miscellaneous expenditures, including public buildings, light-houses, and collecting the revenue	40,098,432 73
For expenditures on account of the District of Columbia	3,817,028 48
For interest on the public debt	59,160,131 25
Total ordinary expenditures	265,408,137 54
Leaving a surplus revenue of	132,879,444 41
Which, with an amount drawn from the cash balance in the Treasury of	1,299,312 55
Making	134,178,756 96
Was applied to the redemption—	
Of bonds for the sinking-fund	44,850,700 00
Of fractional currency for the sinking-fund	46,556 96
Of funded loan of 1881, continued at 3½ per cent	65,380,250 00
Of loan of July and August, 1861, continued at 3½ per cent	20,594,600 00
Of funded loan of 1907	1,418,850 00
Of funded loan of 1881	719,150 00
Of loan of February, 1861	18,000 00
Of loan of July and August, 1861	266,600 00
Of loan of March, 1863	116,850 00
Of loan of July, 1882	47,650 00
Of five-twenties of 1862	10,300 00
Of five-twenties of 1864	7,050 00
Of five-twenties of 1865	9,600 00
Of ten-forties of 1864	133,550 00
Of consols of 1865	40,800 00
Of consols of 1867	235,700 00
Of consols of 1868	154,650 00
Of Oregon-war debt	5,450 00
Of refunding certificates	109,150 00
Of old demand, compound-interest, and other notes	13,300 00
Total	134,178,756 96

The requirements of the sinking-fund for the past fiscal year, including a balance of $461,309.15 from the preceding year, have been fully met. It is estimated that the requirement for the present fiscal year will be $45,816,741.07, of which there has been applied during the first four months of the year the sum of $28,786,550.

Compared with the previous fiscal year, the receipts for 1883 have in the following items decreased $15,172,048.38: In customs revenue, $5,704,233.32; in internal revenue, $1,777,226.47; in direct tax, $51,985.09; in premium on exchange and interest on deposits with bankers in London, $37,772.99; in proceeds of sales of school-buildings, fire-engines, &c., in the District of Columbia, $97,174.81; in proceeds of sales of Government property, $29,904.83; in proceeds of sales of railway material, $95,000; in proceeds of sales of ordnance material and small stores, $247,112.27; in proceeds of sales of military reservations, $29,966.31; in proceeds of sales of products from experiments in the manufacture of sugar, $789.35; in steamboat fees, $95,700.86; in Indian trust funds, interest and premium, $5,893,074.55; in sales of Indian lands, and interest on deferred payments, $193,649.73; in deposits by individuals for surveying public lands, $830,694.60; in reimbursement by national-bank redemption agency, $57,174.17; in Hot Springs reservation, $23,880.76; and in depredations on public timber, $6,708.27. There was an increase of $9,934,380.05, as follows: In sales of public lands, $3,202,724.05; in revenues of the District of Columbia, $255,762.06; in tax on circulation and deposits of national banks, $154,214.40; in repayment of interest by Pacific railway companies, $716,312.53; in sinking-fund for Pacific railway companies, $525,831.69; in consular fees, $125,029.61; in custom-house fees, $28,661.74; in customs fines, penalties, and forfeitures, $28,945.94; in customs emolument fees, $35,280.66; in marine-hospital tax, $9,779.66; in registers' and receivers' fees, $347,065.65; in fees on letters-patent, $211,275.41; in profits on coinage, bullion deposits, and assays, $343,511.44; in proceeds of Japanese indemnity fund, $1,839,533.99; in donations towards liquidating the public debt, $964,426.87; in immigrant fund, $231,476.50; in Soldiers' Home permanent fund, $65,623.54; in proceeds of sale of post-office property in New York city, $648,694.82; in tax on seal-skins, $409.50; and in miscellaneous items, $199,819.99; making a net decrease in the receipts from all sources of $5,237,668.33.

The expenditures show an increase over the previous year of $21,717,930.57, as follows: In the War Department, $5,340,888.74; in the Navy Department, $251,390.91; in Pensions, $4,667,379.69; and in civil and miscellaneous, $11,458,271.23. There was a decrease of

$14,291,232.60, as follows: In interest on the public debt, $11,917,075.54; and for Indians, $2,374,157.06; making a net increase in the expenditures of $7,426,697.97.

FISCAL YEAR 1884.

For the present fiscal year the revenue, actual and estimated, is as follows:

Source.	For the quarter ended September 30, 1883.	For the remaining three quarters of the year.
	Actual.	Estimated.
From customs	$87,402,975 67	$137,597,024 33
From internal revenue	29,062,078 60	90,337,921 40
From sales of public lands	2,923,635 17	5,067,364 83
From tax on circulation and deposits of National Banks	1,557,800 88	1,542,199 12
From repayment of interest and sinking-fund, Pacific railway companies	521,059 51	1,478,940 49
From customs fees, fines, penalties, &c	298,696 78	901,303 22
From fees—consular, letters-patent, and lands	963,209 80	2,436,790 20
From proceeds of sales of Government property	112,562 23	167,437 77
From profits on coinage, &c	950,229 46	3,149,770 54
From deposits for surveying public lands	172,461 31	327,538 69
From revenues of the District of Columbia	256,017 99	1,643,982 01
From miscellaneous sources	1,237,189 63	2,393,810 37
Total receipts	95,986,917 03	247,033,082 97

The expenditures for the same period, actual and estimated, are:

Object.	For the quarter ended September 30, 1883.	For the remaining three quarters of the year.
	Actual.	Estimated.
For civil and miscellaneous expenses, including public buildings, light-houses, and collecting the revenue	$15,385,799 42	$51,114,200 58
For Indians	2,623,390 54	4,126,609 46
For pensions*	16,285,261 98	53,714,738 02
For military establishment, including fortifications, river and harbor improvements, and arsenals	13,512,204 33	26,487,795 67
For naval establishment, including vessels and machinery, and improvements at navy-yards	4,199,299 69	12,300,700 31
For expenditures on account of the District of Columbia	1,138,856 41	2,511,143 59
For interest on the public debt	14,797,297 96	39,702,702 04
Total ordinary expenditures	67,942,090 33	190,057,909 67

Total receipts, actual and estimated	$343,000,000 00
Total expenditures, actual and estimated	258,000,000 00
	85,000,000 00
Estimated amount due the sinking-fund	45,816,741 07
Leaving a balance of	39,183,258 93

*This estimate is based on information from the Pension Bureau of the Department of the Interior. It should also be stated that there is an unexpended balance of $39,000,000 of the appropriation for pensions for the fiscal year 1883, which was reappropriated by Congress at its last session; that Congress at the same time appropriated $86,000,000 for the fiscal year 1884; and that the Commissioner of Pensions sets the needs of his Bureau at $40,000,000 for the year 1885; thus making $165,000,000 required by him during the years 1884 and 1885.

FISCAL YEAR 1885.

The revenues of the fiscal year ending June 30, 1885, are thus estimated upon the basis of existing laws:

From customs	$195,000,000 00
From internal revenue	120,000,000 00
From sales of public lands	8,000,000 00
From tax on circulation of national banks	3,000,000 00
From repayment of interest and sinking-fund, Pacific railway companies	2,000,000 00
From customs fees, fines, penalties, &c	1,200,000 00
From fees—consular, letters-patent, and lands	3,300,000 00
From proceeds of sales of Government property	300,000 00
From profits on coinage, &c	4,000,000 00
From deposits for surveying public lands	500,000 00
From revenues of the District of Columbia	1,900,000 00
From miscellaneous sources	3,800,000 00
Total estimated ordinary receipts	343,000,000 00

The estimates of expenditures for the same period, received from the several Executive Departments, are as follows:

Legislative		$3,234,085 10
Executive		18,403,277 55
Judicial		408,300 00
Foreign intercourse		1,569,601 75
Military establishment		27,136,152 41
Naval establishment		22,747,751 38
Indian Affairs		8,466,809 91
Pensions*		40,000,000 00
Public works—		
Treasury Department	$4,434,817 42	
War Department	11,649,049 62	
Navy Department	1,021,138 00	
Interior Department	638,608 47	
Department of Justice	16,600 00	
		17,760,213 51
Postal Service		2,958,111 29
Miscellaneous		21,668,591 63
District of Columbia		3,625,373 47

*See foot-note on page 26.

Permanent annual appropriations—		
Interest on the public debt	$51,500,000 00	
Sinking-fund	46,269,756 95	
Refunding—customs, internal revenue, lands, &c	7,293,600 00	
Collecting revenue from customs	5,500,000 00	
Miscellaneous	4,583,680 00	
		$115,147,036 95
Total estimated expenditures, including sinking-fund		283,125,304 95
Or, an estimated surplus of		59,874,695 05

Excluding the sinking-fund, the estimated expenditures will be $236,855,548, showing an expected surplus of $106,144,452.

EXCHANGE OF THREE-AND-A-HALF PER CENT. CONTINUED BONDS INTO THREE PER CENT. BONDS.

The exchange of 3½ per cent. bonds into 3 per cent. bonds, under the authority of the eleventh section of the act of July 12, 1882, was resumed November 1, 1882, and continued until July 26, 1883. On this last day a call was made for the remaining 3½ per cent. bonds then outstanding, interest to cease November 1, 1883, and holders were notified that such bonds would not be exchanged into 3 per cent. bonds.

The exchanges made prior to November 1, 1882, amounted to	$259,370,500
Exchanges during the year, to	46,210,750
Making the aggregate of 3½ per cents taken up and 3 per cents issued	305,581,250

The annual saving of interest effected by these exchanges amounts to $1,527,906.25.

REDEMPTION OF UNITED STATES BONDS.

Three-and-a-half per cent. bonds.

On November 1, 1882, the outstanding bonds of the 5 per cent. funded loan continued, bearing interest at the rate of 3½ per cent., amounted to $155,356,350. These bonds were the only bonds then "redeemable at the pleasure of the Government," because, bearing a higher rate of interest than the 3 per cent. bonds, the latter could not be redeemed until the former had been, that being the terms of the law under which the latter were issued. A portion of them had been called, but had not then matured. As mentioned above, $46,210,750 of

the bonds have been exchanged into 3 per cent. bonds upon requests of the owners, leaving $109,145,600 available for the investment of the surplus revenues. Calls have been issued for the entire amount, and the greater portion of the bonds have been redeemed and cancelled, the annual saving of interest which will result therefrom being $3,820,096.

Three per cent. bonds.

Under the provisions of the act of July 12, 1882, the 3 per cent. bonds issued thereunder, and amounting to $305,581,250, became "redeemable at the pleasure of the Government" on and after July 26, 1883, all "redeemable" bonds bearing a higher rate of interest having then been redeemed or called. Calls have been issued for $40,000,000 of such bonds, $30,000,000 of which will mature in the month of December, and $10,000,000 on the first day of February, 1884.

Japanese indemnity-fund bonds.

In addition to the above, the bonds described below, held by the Department of State and forming what has been known as the "Japanese indemnity fund," have been cancelled and destroyed, as directed by the act approved February 22, 1883, viz:

Funded loan of 1881, continued at 3½ per cent	$368,100
Consols of 1907, 4 per cent	1,418,850
Three per cent. loan of 1882	47,650
Total	1,834,600

The Joseph L. Lewis legacy.

There have also been cancelled and destroyed the following-described interest-bearing bonds, which were bequeathed to the United States by the late Joseph L. Lewis, and delivered to this Department by the executors of his estate, in accordance with the decree of the United States court for the district of New Jersey:

Loan of July and August, 1861, (3½ per cent.)	$900,000
Funded loan of 1881, continued at 3½ per cent	50,000
Three per cent. loan of 1882	4,600
Total	954,600

The following table shows in detail the redemptions and cancellations of United States bonds during the twelve months ending October 31, 1883:

Bounty-land scrip, act of February 11, 1847, (6 per cent.)	$100
Seven-thirty notes of July 17, 1861	350
Seven-thirty notes of 1864–1865	3,200

Loan of February 8, 1861	$65,000
Oregon-war debt	1,000
Five-twenties of February 25, 1862	7,000
Five-twenties of 1865, (May and November)	10,300
Ten-forties of 1864	76,450
Consols of 1865	78,700
Consols of 1867	189,400
Consols of 1868	146,500
Loan of July and August, 1861, (6 per cent.)	285,500
Loan of March 3, 1863, (6 per cent.)	87,000
Funded loan of 1881, (5 per cent.)	421,650
Loan of July and August, 1861, continued at 3½ per cent.	2,920,300
Loan of March 3, 1863, continued at 3½ per cent	3,747,150
Funded loan of 1881, continued at 3½ per cent	103,365,150
Consols of 1907, (4 per cent.)	1,418,850
Loan of July 12, 1882, (3 per cent.)	52,250
Total	112,875,850

The reduction in the annual interest charge by reason of these changes, to November 1, 1883, is as follows:

On bonds redeemed or interest ceased	$3,704,450 00
On bonds exchanged into 3 per cent. bonds	231,053 75
Total	3,935,503 75
Deduct for interest on 4 per cent. bonds issued, &c	482 00
Net reduction	3,935,021 75

The following table shows the changes in the interest-bearing debt during the year:

Title of loan.	Rate of interest.	Outstanding Nov. 1, 1882.	Issued during the year.	Redeemed during the year.	Exchanged into 3 per cent. bonds.	Outstanding Oct. 31, 1883.
Funded loan of 1881	5 p. cent., continu'd at 3½ p. c.	$155,356,350		*$809,950 103,365,150	$46,210,750	†$4,970,500
Loan of July 12, 1882	3 per cent.	259,370,500	$46,210,750	52,250		305,529,000
Funded loan of 1891	4½ per ct.	250,000,000				250,000,000
Funded loan of 1907	4 per cent.	738,929,600	‡109,950	1,418,850		737,620,700
Refunding certificates	4 per cent.	423,750		§97,900		325,850
Navy-pension fund	3 per cent.	14,000,000				14,000,000
Total		1,418,080,200	46,320,700	105,744,100	46,210,750	1,312,446,050

*Ceased to bear interest during the year, but not yet presented for payment.
†Called, interest ceasing November 1, 1883.
‡Of this issue, $12,050 was on account of accrued interest on $97,900 refunding certificates converted.
§Redeemed by conversion into 4 per cent. bonds.

CONVERSION OF REFUNDING CERTIFICATES.

Since November 1, 1882, refunding certificates issued in 1879, under the act of February 26, 1879, have been presented for conversion into 4 per cent. bonds as follows:

Principal	$97,900 00
Accrued interest due	15,450 50
Total	113,350 50
For which settlement was made as follows:	
Four per cent. bonds issued	$109,950 00
Interest paid in cash	3,400 50
Total	113,350 50

The certificates still outstanding amount to $325,850.

STANDARD SILVER DOLLARS.

On November 1, 1883, under the act of February 28, 1878, there had been a coinage of standard silver dollars amounting to $156,720,949; there were in the Treasury at that date, $116,386,017 There were then in circulation, and in the mints on account of profits on the coinage not yet deposited in the Treasury, $40,334,932. There were in circulation on November 1, 1882, $35,383,786. The coinage between the 1st of November, 1882, and the same date in 1883 had increased $28,391,069; the amount in circulation for the same time had increased $4,136,321; thus keeping up the great disproportion between the amount ready to be supplied and the demand for them, heretofore noted in the reports of this Department. The silver dollars in the Treasury on November 1, 1883, were held or stored at the places as shown in the following table:

Statement showing the amount of standard silver dollars and silver certificates in the Treasury offices, United States mints, and assay offices November 1, 1883.

In office of—	Standard silver dollars.	Silver certificates.
Treasurer U. S., Washington	$2,729,121	$1,318,870
Assistant treasurer U. S., Baltimore	2,754,202	506,990
Assistant treasurer U. S., New York	23,410,009	3,843,900
Assistant treasurer U. S., Philadelphia	8,516,500	385,400
Assistant treasurer U. S., Boston	1,755,196	335,490
Assistant treasurer U. S., Cincinnati	881,500	550,000
Assistant treasurer U. S., Chicago	4,862,400	333,000
Assistant treasurer U. S., St. Louis	5,202,400	626,000
Assistant treasurer U. S., New Orleans	5,793,497	1,362,720
Assistant treasurer U. S., San Francisco	16,298,000	4,270,000
Mint U. S., Philadelphia	4,169,611	.....
Mint U. S., Carson	2,176,749	.....
Mint U. S., New Orleans	6,725,222	.....
Mint U. S., San Francisco	31,095,677	.....
Assay office U. S., New York	8,589	.....
Assay office U. S., Charlotte	4,500	.....
Assay office U. S., Helena	2,853	.....
In transit	.....	100,000
Total	116,386,017	13,632,370

THE TRADE-DOLLAR.

Here I may speak of "*the trade-dollar*," the debased coin to which attention has been drawn by public clamor and discussion. Doubtless the legislative purpose in creating it, was to make a piece of money that would find favor with Asiatic people, and not one for use at home. That purpose was not made known, however, by the letter of the law under which it issued from the Mint. The act of 1873, under which the coinage of it began, has these words: "The silver coins of the United States shall be a trade-dollar; a half-dollar, or fifty-cent piece; a quarter-dollar, or twenty-five-cent piece; a dime, or ten-cent piece." The act further declares that the relative proportion of pure metal and alloy in the trade-dollar, and the devices and legends upon it, shall be the same as those of the other coins of the United States. That act, and a later one of 1877, made it a crime to counterfeit any of our coins, and, as the trade-dollar was declared to be a coin, made it a crime to counterfeit it. The act of 1873 made the silver coins of the United States, and hence the trade-dollars, a legal tender at their nominal value for any amount not over five dollars. Thus the reading of the laws taught the people that the trade-dollar was a coin of their Sovereignty, and for the redemption of which, at an unabated value, their Government was bound. The real legislative purpose, is to be blindly sought for in tradition or in the record of Congressional discussion, and is indicated in the joint resolution of 1876, which took away from this coin the legal-tender quality of it, and held down the coinage of it to the call for it for exportation. It is plain that a busy people, finding this coin afloat in the channels of business, styled a coin of the United States, would readily believe that it was an authentic issue of the Government, and to be redeemed by the Government, the same as other money put out by it. From time to time, however, as it suits scheming men and the occasion fits, a hue and cry is raised against it, it is discredited in the marts, and unwary holders suffer loss or inconvenience.

As it is a coin of the United States, having the image and superscription thereof, sanctioned as such by penalties upon the counterfeiting of it, and once dignified as a legal tender in payment of debts and dues, it should be restored to its first state, or called in at its nominal value and melted. In the judgment of this Department, it should be thus called in and melted. And why not? First: It has been claimed officially that it did not go into home circulation, until after the passage of the joint resolution above spoken of whereby the legal-tender quality of it was taken from it. Hence, it is said, it is no duty to our people to re-

deem it at more than the value of it as silver bullion. Secondly: On the other hand, it is asserted that the act of 1878 gave back to it the legal-tender quality. That act declares that "there shall be coined * * * silver dollars * * * of four hundred and twelve and one-half grains, * * * which, with all silver dollars heretofore coined * * * *of like weight and fineness*, * * * shall be a legal tender * * *." As the trade-dollar is greater in weight and as great in fineness as the silver dollar thus authorized, and as the greater includes the less, it is argued that the phrase "of like weight and fineness" takes in the trade-dollar, makes it again a legal tender for debts and dues, and that there needs but a declaration thereof by this Department to put it in the same rank and acceptability as the standard silver dollar, and so there is no need of redeeming it. The first of these contentions is too technical and close for use in dealing with so practical a matter, and one in which the prime action and continued silent sufferance of the Government has been so misleading. The second of these contentions is not well founded. The phrase "of like weight and fineness" may properly be said to take in only silver dollars issued under the acts of 1792 and 1837. They contained exactly the same amount of pure metal as the dollar authorized by the act of 1878, and had no distinctive name, such as the trade-dollar. This Department has been and still is of the opinion that a correct legal interpretation of that act, in connection with the joint resolution of 1876, denies to the trade-dollar a legal-tender quality.

It is possible to make an estimate of the amount that would come to the Treasury for redemption if authority were given therefor. The whole issue of the coin has been $35,960,446. Some of that has disappeared in manufactured articles; it is estimated from one to two millions. It is calculated that five-sixths thereof went abroad in the beginning, and it is believed that but a small part of that has come back, and that there is now held by our people but from five to eight millions. Of that which remained abroad, there is good authority for saying that much of it found its way from China to India, and into the melting-pot at the mint in Calcutta, and has been there cast into the coin of that country. The overweight and value of the trade-dollar by the side of the Mexican and Spanish dollar, with which it was co-current in China, brought much of it to the crucible there. It is understood in business circles, that in China silver coin is used by weight and not by count, save in a few ports, where Mexican dollars and a few other coins are taken by tale. It is the practice of Chinese bankers, so it is reported, to stamp with their own mark the coin which they take and pay out. The coin thus defaced soon comes to the state and repute of bullion,

and the presumption is that our trade-dollars have, many of them, been so treated and so suffered.

Bear in mind, too, that from time to time for some years past, until of a comparatively late date, there has been inducement to reship this coin from China hither, because it has been free in circulation in most parts of the land, and for most of the time at a par with gold and silver money. There is reason to believe, then, that besides the sum of it in the hands of our own people, an embarrassing amount will not come upon us from abroad.

A thorough and effective redemption of it can be brought about in this way: Let authority be given by Congress to the Treasury Department to barter for trade-dollars at their nominal value, standard dollars at their nominal value, and melting the trade-dollars to recoin them into standard silver dollars, counting the trade-dollars got in this way as a part of the silver bullion which the act of 1878 empowers and directs to be bought and coined monthly. Should the trade-dollars have been so abraded in use as to have lost a material part of their original weight, which is not much to be apprehended, a deduction might be made from the price, and fractional payments made in subsidiary and minor silver coin.

The agitation of this matter has led out some objections to the redemption above suggested. As the standard silver dollar, because of its unlimited legal-tender quality, is equal in its faculty of domestic purchase to the gold dollar, and to the Treasury note with its like attributed legal-tender quality, it is said, that thus to enable the holders of the trade-dollars to get for them standard dollars, would be to raise the trade-dollars in popular esteem and in practical value to a par with standard dollars, and thus to keep them afloat rather than to bring them in, and thus, also, to swell the volume of legal-tender silver money in circulation by so much as is the sum of the trade-dollars in the hands of the people. This effect may be prevented by setting a bound to the time during which the exchange may be made. If a law authorizing the exchange should run but for a twelvemonth, holders of the coin would make haste to rid themselves of it, and at the end of the time little of it would be found at large, and that little would fall back to its bullion value, and cease to disturb in the way apprehended. It is not proposed to increase by this means the coinage of the standard silver dollar, but as the trade-dollars are taken in to count them as so much silver bullion, and make them meet by so much the direction to buy silver bullion for dollar coinage.

Nor is the fear well grounded that there would be caused a large influx of trade-dollars from abroad, to a cost to the Government in

the redemption, of more than the value of them as bullion. It has been stated above that there is cause for belief that much which has gone abroad has put off its character of a coin of the United States, and so is not able in that guise to come back for exchange. If, however, a serious apprehension is felt that it will return in embarrassing volume, the time for the exchange might have a narrower limit, and instead of a twelvemonth, a quarter of a year be the period fixed. This Department would rather see all the trade-dollars that are afloat anywhere, brought in and made bullion of, even at a cost to the Government, if thus we may be rid of a discredited and debased coin; but if this may not be, it still will wish that those in the hands of our people be redeemed in the mode recommended, with safeguards against foreign holders. If it be urged that, whatever be the sum redeemed, there will be a loss to the Treasury in recoining the trade-dollars as bullion into standard dollars, rather than in purchasing bullion in the market at ruling rates and coining it under existing law, it may be answered that the excess of silver in the one over that in the other will be nearly if not fully enough to pay the cost of the manipulation; and again, that the seigniorage or profit now got from buying bullion at, for example, $99\frac{8}{10}$ per standard ounce, and issuing the same in nominal dollars, at the rate of, say, $116\frac{4}{10}$ per standard ounce, is only a seeming total profit of the difference; for in the redemption of the coin, which must be looked for and provided for as to sooner or later come, the Government must, as a rule, take it back at the same nominal value at which it was put forth.

If it be apprehended that by the proposed exchange the sum of the standard dollars will be enlarged, and more of them will be forced into circulation to the inflation of the currency, the disturbance of the relative bearing of executory contracts and the jostling of values, it is to be said, that a desirable part of the plan suggested, guards from an increase of the monthly purchase of silver bullion and of the coinage of the standard dollar. That part is, that as the trade-dollar is taken in for the standard dollar paid out, the former be counted as so much silver bullion, and by so much abate from the purchase in the market under the act of 1878. And if the receipt of the trade-dollars by the exchange in any month shall be, when treated as bullion, more in sum than would be a purchase of two millions' worth of bullion, then the excess thereon can be carried forward from month to month, so far as need be to keep within the direction of the act of 1878 for monthly purchases. And this would be more or less likely to come into play as the limit of time for redemption is shorter or longer. If, indeed, no limit of time was fixed, or it was made as long as a twelvemonth,

this Department could be empowered to refuse redemption in one month of a sum more than enough to meet the requirement of that act, and still make full redemption of all that is likely to be brought in therefor.

If it be said that much of this coin, discredited and practically debased, is in the hands of speculators who have taken it at a discount, and that they would profit by legislation which would increase the actual value of it; while it may not be denied that lamentably this is too far the case, still it is to be answered that such is the luck brought by all debased coin when at last it is fairly redeemed. Speculators will make by a depreciation and following appreciation. A law for a fair redemption must have, with its good, the evil of helping some to gain who ill deserve it. The fault is not much more with the speculative trader, than with the legislation that has given him the chance for ignoble gain. His profit is a light incident, calling slightly for attention, because of the great general good to come from calling in a discredited coinage. Besides, leave this coin unredeemed, and by and by, when public attention is at a lull again, it will be once more set afloat at nominal value, to be in fulness of time once more discredited and lowered in purchasing power to the harm of good people. Moreover, the information which I have from practical and reliable men, who are at the sources of knowledge on this head, is that those known as tradesfolk, and most of the working people not in straits, uncompelled by necessity to part with the trade-dollar at a loss, have held it during panics, looking and waiting for action by the Government; and that the amount stored by brokers is a small part of what is in domestic ownership, the larger part being held by those who took them at full face for labor and in traffic in legitimate and honorable dealing. It is best, once for all, to call it in and put it out of possible use.

This Department does not recommend that a legal-tender quality be again given to the trade-dollar, to the sudden increase of the legitimate silver money of the country, with the inconvenience and incongruity of two dollars circulating together, of the same metal, of unequal real value and of different devices, yet of equal value in payment of debts and of purchase of property. It recommends that authority be given for the redemption of the trade-dollar in the standard silver dollar, dollar for dollar of nominal value, for the recoinage of the metal so received into a standard silver dollar to accord with the law for that coin, and for a reduction of the amount of silver bullion resulting from the exchange from the quantity of bullion required to be got by monthly purchases, for the purpose of coinage under the act of 1878. In the judgment of this Department that legislation is safe, and is demanded

by the character of this issue, and by the need of the people for relief from the confusion and exposure to recurring loss caused by its presence in the monetary system of the country.

SILVER CERTIFICATES.

The amount of silver certificates outstanding November 1, 1883, was	$99,579,141
The amount outstanding at the same date in 1882 was	73,607,710
There was held by the Treasury on the 1st of November, 1882	7,987,260
And on the same date in 1883	14,244,760

These figures show an increase of the silver certificates in the hands of the people of $19,713,931. Figures given above show a like increase of silver dollars of $4,136,321.

Yet it is apparent that any demand that is likely to arise for silver dollars, or for the silver certificates based upon them, may be readily met without further immediate coinage of the dollars or preparation of the certificates for issue. It is also apparent that to keep up an aimless purchase of silver bullion, at the rate of over twenty-four millions of dollars each year, is a needless use of public money and of the taxing power to supply them, incurring a needless loss of the interest on the sum thus expended, and the expense of the manipulation. Apart from any consideration of the policy underlying the coinage at all, of the standard silver dollar, as now authorized, it would seem that an operation of the Treasury and its mints, for which there is no immediate call, might be at least temporarily suspended.

The Department makes no further comment upon these facts, but refers to its last two annual reports for its views upon the continued coinage of silver dollars and the issue of silver certificates, and for its recommendations thereupon.

GOLD CERTIFICATES.

Under the act of Congress of 1882, gold certificates have been prepared and have been issued as is shown in the following table:

Denominations.	Ready for issue Nov. 1, 1882.	Issued up to Nov. 1, 1883.
[illegible]	$21,440,000	$12,960,000
[illegible]	16,800,000	10,200,000
[illegible]	16,000,000	9,700,000
[illegible]	14,000,000	9,250,000
[illegible]	20,000,000	14,000,000
[illegible]	22,500,000	10,000,000
[illegible]	85,000,000	30,000,000
Total	195,740,000	96,110,000

These are of two kinds, styled in the Department, the New York certificate and the Departmental certificate. The first is made payable by its terms at New York city; the second is dated at Washington, D. C., but expresses in its terms no place of payment.

The following table shows the amount of gold certificates received for issue, the amount issued, and to what offices, and the amount now held in reserve:

Gold certificates, act July 12, 1882.	$20.	$50.	$100.	$500.	$1,000.	$5,000.	$10,000.	Total.
	Dollars.	*Dollars.*	*Dollars.*	*Dollars.*	*Dollars.*	*Dollars.*	*Dollars.*	*Dollars.*
Received for issue to Nov. 1, 1883	21,440,000	16,800,000	16,000,000	14,000,000	20,000,000	22,500,000	35,000,000	195,740,000
Issued to Nov. 1, 1883:								
New York	10,560,000	9,000,000	6,900,000	5,250,000	6,000,000	10,000,000	30,000,000	77,710,000
San Francisco	240,000	600,000	2,000,000	4,000,000	8,000,000			14,840,000
Chicago	1,300,000							1,300,000
Philadelphia	240,000	200,000	400,000					840,000
Cincinnati	80,000	300,000	400,000					780,000
Washington	540,000	100,000						640,000
	12,960,000	10,200,000	9,700,000	9,250,000	14,000,000	10,000,000	30,000,000	96,110,000
In reserve Nov. 1, 1883:								
New York	320,000	1,000,000	1,100,000	4,750,000	6,000,000	10,000,000	50,000,000	73,170,000
Washington	8,160,000	5,600,000	5,200,000			2,500,000	5,000,000	26,460,000
	8,480,000	6,600,000	6,300,000	4,750,000	6,000,000	12,500,000	55,000,000	99,630,000
								96,110,000
Aggregate								195,740,000

COINS AND COINAGE.

The coinage executed at the mints during the fiscal year was less in value than in the year immediately preceding. Yet the continued demand for smaller denominations of coin for change, made an increase in the number of pieces struck. It was eleven and a half millions over that of any year since the organization of the Mint Bureau.

The description and value of the year's coinage are as follows:

Description.	Pieces.	Value.
Gold	2,407,022	$35,936,927 50
Silver	35,308,076	28,835,470 15
Minor	60,951,526	1,428,307 16
Total	98,666,624	66,200,704 81

Of the gold, $27,526,120 were coined into double-eagles, principally at the mints on the Pacific coast, while the coinage at Philadelphia and New Orleans was chiefly in eagles and half-eagles.

The coinage of silver consisted almost wholly of standard dollars, of which $19,641,119 were coined at Philadelphia and New Orleans, and

but $8,470,000 at the Carson and San Francisco mints, the reason therefor being that at the first two named mints the number issued nearly equalled the coinage. The accumulations in the last two named, and in the assistant treasurer's office at New York city, amounted to over $40,000,000.

The demand for minor coins required the coinage and issue at the Philadelphia mint of 20,455,488 of five-cent pieces and 40,467,400 bronze cents.

The deposits of gold bullion and coin for the last fiscal year were less than those of the year immediately previous, owing to diminished imports. The total amount received and manipulated was $49,145,559.16 gold. There was of silver $38,612,594.89.

The purchases of silver for the coinage of the standard dollar were 25,432,490.27 standard ounces, at a cost of $25,577,327.58, averaging $2,131,444 worth per month. The average cost was $1.117+ per ounce fine, while the average New York price would have been $1.118+ per ounce fine.

During the fiscal year, $619,198.90 in uncurrent silver coins were transferred from the Treasury to the Mint for recoinage, the loss upon which was $34,698.36. The nominal profits on the coinage of standard dollars during the year were $3,701,331.78, and on fractional silver, $9,160.24.

In addition to the coinage, the mints and assay offices made $18,269,205.26 in gold bars and $8,050,602.10 in silver bars. The value of gold bars exchanged for gold coin at the New York assay office was $5,173,965.22, and at Philadelphia, $187,541.07.

The coin circulation of the country on July 1, 1882, is estimated, from the statistics of coinage and net imports of coin, to have been—

United States gold coin	$500,882,185
United States silver coin	199,573,360
Total	700,455,545

These amounts were increased on the 30th of June last by coinage and imports of coins to the following amounts:

United States gold coin	$537,254,794
United States silver coin	228,216,199
Total on 30th June, 1883	765,470,993

There was a further increase by coinage and imports during the next quarter of—

United States gold coin	$7,257,905
United States silver coin	7,075,124
Total	14,333,029

The mints and assay offices held for coinage on the 1st of October, $61,683,816 of gold bullion and $5,107,911 of silver bullion, making the total amount of United States coin and bullion available for coinage on October 1—

United States gold coin	$544,512,699
United States gold bullion	61,683,816
United States silver coin	235,291,323
United States silver bullion	5,107,911
Total	846,595,749

Inquiries as to the production of the precious metals, and their consumption in coinage, the arts, and manufactures, and for the collection of other monetary statistics of our own and foreign countries, have been continued by the Mint Bureau, and much valuable information thereon has been obtained and appears in the report of the Director.

While upon this subject, the Department recommends a revision and amendment of the coinage laws. The minor coins are not what they should be, either in appearance, in convenience, or in the ease with which some may be distinguished from others by the sense of touch or even that of sight. There is so much resemblance of some of small value to some of greater value, that often holders or receivers confound them, and mistake them for others, and loss is sustained. From time to time there has been an increase by law of the devices upon them to an extent hindering the attainment of a good design. There can be improvement by a change of the metal of which some of them are to be made, and by the discontinuance of some of denominations not needful for use.

The accumulation of standard silver dollars in the custody of this Department at the date of its last annual report was such as to cause serious inconvenience, actual and prospective, for the want of safe storage-room. The vaults owned and hired by the Treasury are still heavily taxed for room, and frequent transfers must be made, at risk and cost. It is looked for that this ill will soon, in some measure, be abated. The Department is making a vault in the Treasury building at Washington, which will hold forty-five millions of silver dollars, and another at New Orleans, which will hold twenty-eight millions.

NATIONAL BANKS.

The report of the Comptroller of the Currency shows that the number of national banks in operation November 1, 1883, was 2,522, an increase over all former years. The number of banks organized during the year is 261, the greatest number organized during any year since 1865. They exist in every State and organized Territory of the Union. The capital of the newly-organized banks is $28,654,350, and the circulation $7,909,150, which is about one-fourth of the capital, showing that the banks have taken advantage of section 8 of the act of July 12, 1882, which authorizes banks of $150,000 capital and under to be organized upon the deposit of bonds to the amount of one-fourth of the capital. Returns made on October 2d of this year show an aggregate national-bank capital of $509,699,787, an increase of $26,595,574 during the year; a surplus of $102,000,482; a circulation of $314,931,575, and individual deposits of $1,049,437,700, both of which are in decrease; loans of $1,303,450,790, and specie of $107,817,983, both of which are in increase. The corporate existence of 307 has expired during the year, of which 273 have renewed it under the act passed by the last Congress. Seventeen have been placed in liquidation by vote of their shareholders, four have expired by limitation, and all but two of these have been succeeded by new organizations in the same localities, with new titles. These data show that the owners of capital, desirous of investing it in the business of banking, are suited with the national-bank system, and willing to continue or to organize anew under it, when it can be done with a reasonable show of profit. The corporate existence of 983 banks will expire during the next two years—249 in 1884, and 734 in 1885.

The national banks hold, as security for circulation, $352,877,300 of United States bonds, a reduction of $9,613,350 during the year. They hold $201,327,750 of United States 3 per cent. bonds as a basis of circulation. All of the latter are likely to be called for payment during the next four or five years, unless the surplus revenue of the country is diminished. There is little or no profit on circulation based upon 4 and 4½ per cent. bonds, at the present premiums therefor. A continued payment of the 3 per cents will probably result in a large reduction of the bank circulation, unless some counter stimulus is applied. Many propositions have been made to that end.

The national-bank act, at first, provided for the issue of circulation equal to 90 per cent. of the current market value, but not to exceed the par value, of United States bonds bearing 6 per cent. interest; and the subsequent act of March 3, 1865, limited the circulation to

$345,000,000, to be issued in the same ratio to capital, upon 5 and 6 per cent. bonds. Since then the rate of interest upon bonds, and the profit on circulation have decreased. With that decrease, the ratio of circulation issued upon the actual or market value of bonds has also decreased, until it is probable that, without helping legislation, loss, instead of gain, will ensue from depositing bonds as security for circulation.

The holder of bonds can borrow money in the market upon them as a pledge, at 95 per cent. upon their market value. There is a discrepancy with this, in the requirement of the law that $90 only of circulation shall be issued upon bonds, some of which have a market value of $122. This asks a margin of $32 as security for circulation, instead of $10, as it was at the start of the system. The Comptroller says, that if from the beginning, $100 of circulation had been issued upon $70 of bonds, no loss would have accrued to holders of the bills of insolvent and failing banks, though there might have been loss to general creditors, who must have depended upon assets substituted for bonds released. The aggregate capital of the national banks which have failed during the last twenty years was about twenty millions. If upon the bonds held as security for the notes of those banks, circulation had been issued for the full par value, and there had been a decline of 5 per cent. in the value of the securities, still, the whole loss would not have exceeded one million of dollars, which would have fallen upon creditors, and not upon bill-holders, so long as the bonds were assets in the hands of a receiver. Moreover, a gain accrues to the Government, by law, from the non-redemption of national-bank notes. They have been in circulation for twenty years. The Comptroller estimates that from 1 to 1½ per cent., or for that period about $4,000,000, will never be brought in for redemption. That sum will be in excess of any possible loss that can threaten the Government from authorizing an issue of circulating notes at 90 per cent. upon the market value of bonds deposited. By law, if bonds held by banks decline in value below the amount of circulation issued, the Comptroller may demand additional bonds or money to equal the disparity. Moreover, all the assets of the banks, and the individual liability of the stockholders, can be exhausted, before the bill-holder or the Government suffers loss.

These remarks are prefatory to the recommendation I am about to make, of a mode of keeping national-bank notes in circulation without loss to the banks thereby, and with safety to the Government and the bill-holder. In all that I have to say, I assume that the national-bank system is now adjudged to be a constitutional creation of the legislative power, and that the country has acquiesced in it as such; that

it is looked upon with favor by the greater part of the people; and that there is almost a universal desire to continue the circulation of these notes, as a convenience and a benefit which it would irk us to be without.

The public mind is naturally turned to the inquiry: How shall the national-bank notes be kept in circulation; what shall be taken as a safe foundation therefor, and yet be so low in price as that the banks can afford to buy and deposit; or what can be proposed which will give to the banks safeguard against loss in taking and issuing circulating notes? I am not in favor of anything but the interest-bearing obligations of the United States Government. To go abroad for the securities of other States, is to go out of our political and judicial jurisdiction, and subject ourselves to the hazards of their intestine commotion, of their international conflicts, of possible hostility to this country, and of going before strange tribunals as, perhaps, an unwelcome suitor. The sound policy of many of the States of the Union is, that trustees and other like fiduciary persons, who are more immediately under the hand and guidance of the sovereignty, shall not place their moneys in securities whose habitat is in other jurisdictions, not even in those of sister States. In as large degree is that a fitting policy in this great matter. To rely upon the debts of the States, is to look to a basis not much more permanent than that which the United States bonds now offer, and one which will call for scrutiny and investigation not easily to be made, and which, if fully and fairly made, are likely to excite jealousy and other ill feeling. To take the obligations of municipalities and other corporate bodies is of like impracticability and result, and is also to rely upon the good faith, prudent conduct, and solvency of debtors, over whom the Government has but little, if any, direct and efficient control. To take security on real estate is to launch on a sea of uncertainty and fraud that is sure to wreck the adventurer. Other propositions have been made which are reducible to some of these categories, and need not be specially considered. There are other propositions, the vertebral idea of which is the creation of a new form of public debt. A plausible one is, for the Government to offer a new bond, of its own issue, at low rate of interest, to run a long period, in exchange for its four per cents and four-and-a-half per cents, allowing such a rate of premium upon the latter, but lower than that at present ruling, as would induce the holders to surrender them and take the new: and to make this a security for bank circulation. I doubt not that this is feasible. In that way, a holder of fours or four-and-a-halfs could capitalize the premium allowed on his bond, and draw

interest at the new rate on that as well as on the principal, whereby there would be an inducement to exchange, rather than to hold, or, in the present difficulty of desirable reinvestment, to sell. I am persuaded from the official experience of the last year, that capital is ready and willing to take, at a low rate of interest, all the United States bonds that can reasonably be issued, provided they be at long time of payment of principal. The lower market value which they would have, upon their first issue at least, would bring them within the range of profitable purchase by those who were not holding the fours and four-and-a-halfs with which to make exchange. On the other hand, the premium for exchange, to be allowed by the Government, may be put at such a figure, and still be apt to induce exchange, as that by the time to be fixed for the redemption of the new bonds, the difference in the amount of interest reserved on the fours and four-and-a-halfs, and that paid on the new bonds will have equalled the amount of premium allowed in exchange. Should this project be favorably considered, details can be furnished. Yet I am so averse to recommending the creation of another or a different public debt, that as great as are, in my judgment, the advantages of the national-bank circulation in safety, in uniformity of value everywhere, and in other matters of convenience and confidence, I look upon such project as a *dernier resort*. I rather recommend, and so I do, that the internal-revenue tax upon circulation be taken off in whole or in part. This is 1 per cent. per annum, and amounts to about three millions and a quarter each year.

The privilege of furnishing a circulation has been, in the past, a profit to the banks; it has been, and is an expense to the Government to supervise the issue of it, and generally to take care of the national-bank system. That privilege, like any franchise accorded by Government, when of value to the especial recipient, is a legitimate and preferable subject of taxation. The prime object of the taxation, in the beginning, was to obtain a recompense to the Government for its expenditure in behalf of the banks. It was laid upon this franchise because of the relation between the privilege and the Governmental expenditure. It was made larger than enough for that particular purpose, because then the Government was in quest of subjects for taxation, and the franchise of banking, and especially this one, was of value and profit. But times have changed. The workings of the system, and the relations of it to the business of the country, have changed with them. It is now desirable for the community that the privilege should be continued and exercised. It is no longer, under existing laws, so profitable to the banks as that they all, or any, greatly wish to exercise it. Let us

see, then, whether the Government can take off this tax and keep itself recompensed. The tax yields annually about $3,000,000. The expense of carrying on the Bureau of the Comptroller of the Currency was last year $102,397.08. All other expenses, such as printing and furnishing notes and the like, were $141,363.90; of which $54,600 were for plates which is to be reimbursed by the banks. The net expense to the Government was $189,160.98. The gain to the Government from the loss of notes (as stated above) is at a low estimate $4,000,000 for every period of twenty years, or $200,000 per year. Then the tax may be taken off entirely, and the Government not be a loser. It may be taken off in part, and the Government receive more by reason of this circulation than it expends to keep it in existence. I am aware that this is a reduction of taxation in favor of organized capital; what is taken off here must sooner or later be in some degree taken in elsewhere for means to pay off the public debt. I do not favor the relief of capital to the burden of its competitors, (if that phrase is allowable,) or of its helpers. Yet, if this tax is not taken off by law, and thus the circulation kept in existence, so expensive may it become to the banks to keep up their circulation, that they may cease altogether to do so, for to do so is not compulsory upon them; and in that case the tax ceases with the cessation of the circulation. So that the alternative is presented of striking off the tax, and thus obtaining a public accommodation, or of keeping the law for the tax upon the statute-book without product therefrom, and losing the accommodation by the lack of a motive for furnishing it. In that view the tax will cease, not from favor, but as a means of reaching a desirable end. It is to be considered, too, that in the States, this form of organized capital pays its share, sometimes more than its lawful share, of State and municipal taxation. Still I would not make this recommendation here, did I not, in another place herein, call attention to the need of a reduction of the taxation resting upon the community in general. I further recommend that this Department be authorized to allow to the banks, circulation to the amount of 90 per cent., upon the average market value for the twelve months prior to the deposit, of the United States bonds deposited on security. Thus a bank would be enabled to obtain circulation upon the premium it paid for bonds, as well as upon the par value of them. Had United States bonds never risen above par, no one would have doubted but that a note circulation, based upon them at a ratio of 90 per cent., would have been amply secured. Why should any one doubt that the same ratio on their market value will be safe: the ratio of the circulation furnished, to shift in amount to the side of safety as the market value swings to and fro? It is worthy,

too, of consideration whether the original requirement in the national-bank act of so large a deposit of $100 in bonds for $90 in circulating notes was not, at that time, an expedient for forcing the bonds afloat, as well as a provision for securing the Government and the bill-holder against loss. It is a ratio of security furnished for circulation, without precedent in banking systems, and in theory and experience beyond the needs of the case. Comprehending this, it startles less to think of furnishing the same ratio on the market value. For, after all, it is not a new departure, so much as an assimilation, somewhat, of our system to those accepted in the financial world. For greater caution, there may be fixed a limit of value, above which the valuation of them for adjusting a ratio shall not go. A collateral advantage, not only to the banks but to community, is that an amount of banking assets laid away in the premium paid for bonds would thereby be released and brought into active use. It is understood, as was before stated, that in business circles United States bonds are taken as a good collateral up to 95 per cent. of their market value at the time. To be sure, there is the right reserved, in case of lowering fluctuation in market value, to demand an increase of security. There should the same power be given to this Department, and the difference of 5 per cent. in the business and Governmental margin, will counterbalance the nimbleness of the individual creditor, greater than that of the public agent, in looking after change in market value and in calling for further security.

The statements above made show that there is little danger of ultimate loss to the Government or note-holder, upon a circulation based upon the interest-bearing bonds of the United States, though taken as security at a margin coming near to the current market value thereof.

Other details may be suggested if Congress shall determine to give relief to the bankers, and through them to the people, in this matter, in the method proposed herein.

I think that a retrospect of the twenty-three years last past will descry two things: First: That the civil war could not have been carried on and brought to a desirable result, had not the bonds of the United States been issued and found acceptation with moneyed men. Second: That they would not have found that acceptation had it not been for the lead and the effort of the national banks. Now, it has always been held a prime quality of value in those bonds that they have, by law of the United States, been exempt from taxation by State or municipality. Such is the law of the creation of them. That law has effect when they are in the hands of individuals and of many corporations, and there they are invulnerable by such taxation; but when held by national

banks the law fails of its purpose. Though owned by the banks as a part of their capital or their assets, and used by them in their business, even in their relations with the Government, State legislation has found a way to reach them. It is roundabout and evasive, but it is effectual. The stockholder of a national bank is made to pay a tax on the value of his share in the capital and assets, though they consist largely of the bonds of the United States. I submit that this is not equal taxation, and that it is especially unjust and ungrateful in view of the two statements of fact with which I began this paragraph. Legislation by Congress could forbid such exercise of taxing power, and thereby make the holding of United States bonds, and the use of them for a basis of circulation, more desirable to the banks.

It is plain to him who has knowledge of the usage of the taxing officers of municipalities, and of the political divisions of States, that often there is overvalue put upon the property of banks as compared with that of the individual owner and of many corporations. It would be difficult by Federal legislation to find a means of supervising and preventing this unjust partiality, but there is a reason therein for such relief, in other directions, as it is in the power of Congress to give. There are collateral measures which will give aid to the banks without detriment elsewhere, and may be taken by them in lieu of all, or in aid of scant, profit on circulation. They may not now loan on real estate, or take security thereon as collateral to a personal liability. This restriction might be removed. It has been suggested that the requirement for a reserve might be removed or made less in amount. This is of doubtful expediency. The injunction for a reserve is meant as a restraint on daring or negligent management, and as a safeguard against forced suspension or the need of sharp contractions.

The further legislation by Congress at its last session, to stop the over-certification by the national banks, of checks drawn upon them, has not been kindly acquiesced in and observed. Directly or indirectly, it has been disobeyed, or evasion of it sought. In one case, upon the facts reported by a bank examiner, a reference has been made to the Department of Justice, by this Department, for prosecution. An indictment has been found against a teller. It will be tried in due course, when there will be judicial interpretation of the act of Congress, a judicial ruling upon the conduct deemed a violation of it, and a testing of the temper of a jury summoned from a busy mercantile and money-dealing vicinage.

The Comptroller's report shows that United States bonds are held, too, by State banks, trust companies and savings-banks. The national banks held on 1st November, 1883, as security for circulation and for

public deposits and other purposes, $380,088,350 of interest-bearing bonds of the United States, which is $16,440,050 less than the amount held on the same date of the previous year. Banking institutions, other than national, held these bonds as follows: 754 State banks, in twenty-two States, $5,287,606; 34 trust companies, in five States, $17,437,990; and 630 savings-banks, in fourteen States, $219,017,313—total, $241,742,909; being $21,717,517 less than at the same date of the previous year. The total amount held by national and State banks, and savings-banks, is $621,831,259, nearly one-half of the interest-bearing funded debt of the United States at that date, which was $1,273,475,450.

The maximum amount of circulation issued to 286 State banks, organized either under the safety-fund or free-banking systems of the State of New York, was $50,754,514, and the amount of unredeemed circulation in 1875 was $1,336,337, or 2.63 per cent. of the highest amount issued. The greatest amount of circulation issued to 707 State banks, in twelve States, including the State of New York, was $114,671,346; the amount outstanding, $2,696,282, and the proportion unredeemed, 2.4 per cent. The proportion of national-bank notes redeemed, is much greater than that of State-bank notes under the old system. Of 40 national banks which failed previous to 1876, having a circulation of $6,415,934, the proportion unredeemed is 1.98 per cent. Of 51 national banks in voluntary liquidation previous to 1870, having a circulation of $5,846,740, the percentage unredeemed was 1.42 per cent.; of 38 banks that went into liquidation in 1870, 1871, 1872, having a circulation of $4,917,340, the proportion unredeemed was 1.50 per cent., and of the 76 banks in liquidation during the three following years, having a circulation of $7,823,285, the percentage was 3.60 per cent., while the proportion unredeemed in the whole of the 165 banks above named, having a circulation of $18,587,365, was 2.36 per cent.

PUBLIC MONEYS.

The monetary transactions of the Government have been conducted through the offices of the United States Treasurer, those of nine assistant treasurers, and through one hundred and thirty-nine national-bank depositories.

The gross receipts of the Government, amounting during the fiscal year, as shown by warrants, to $954,230,145.95, ($555,942,564 of which were on account of loans,) were deposited as follows:

In Independent-Treasury offices	$809,590,439 12
In national-bank depositories	144,639,706 83

Several national-bank depositories have been discontinued during the year, their services being no longer required, owing to the consolidation of the internal-revenue districts and the removal of the headquarters of the collectors to more distant points in the new districts; but the gross number of depositories remains about the same, as it became necessary to establish several new ones at places in the West, for the accommodation of public officers busied in that section.

The special examinations of Independent-Treasury offices, by officers of this Department, as required by law, are rendered more difficult and dangerous each year by reason of the bulk of silver coins which has accumulated in the vaults of each office.

An amount of United States gold coin is received every year in the sub-treasury offices, which by abrasion in use has reached the least tolerated weight, and therefore cannot be again paid out. There is no limit of tolerance for silver coins, but a large number of them are redeemed each year under the provisions of the act approved June 9, 1879, which are unfit to be again paid out, being more or less mutilated or defaced. These coins, gold and silver, are carried in the cash at their nominal value, but are unavailable until recoined. They cannot be recoined without some loss. In order that this amount of coin be made available, it is recommended that a sufficient sum be appropriated each year to pay for the cost of the recoinage of such coins.

No appropriation was made for the fiscal year 1884 for recoinage of light-weight gold coins in the Treasury, as required by section 3512, Revised Statutes of the United States.

It often happens that counterfeits of, or altered or sweated, United States coins, are offered to the officers charged with the receipt or disbursement of public money. These officers have a practice, not frowned upon by this Department, to stamp, or otherwise mutilate, all such fraudulent semblances or defective coins, in analogy with the process, authorized by the act of June 30, 1876, (chap. 156, sec. 5,) to be applied to fraudulent paper currency. If it be not in some fashion stigmatized, the false token returns again and again to the officer, to be as often tested and rejected, or goes abroad to the deception of the unwary. Of late, discontent has been shown by some holders of such metallic pieces, and the power of the officers so to treat them has been questioned, in quarters on which suspicion does not rest of evil-doing. It is recommended, that to put the official usage beyond cavil, an act be passed akin to that of 1876, which shall give power to those officers over fraudulent coins or tokens, to break or stamp a false coin or token offered to them, or otherwise make known by mark upon it, that it is not genuine.

That there is likely to be a continuing surplus in the Treasury over the ordinary expenses of the Government, so long as the present revenue laws remain, is seen by those attentive to fiscal affairs. This has called out propositions for the disposal of surplus of public moneys; two of which may be noticed. One is, that the surplus be parcelled out among the States of the Union. This, though it has been ingeniously argued, has not so approved itself to the common sense of the people, as now to call for elaborate statement of reasons why it should not be adopted. The public sense is shrewd enough to see, that a debtor owing a large sum, upon interest which he must pay at short intervals, and some of the principal of which he may pay off whenever he pleases and thus save interest, would not be deemed a good manager of affairs, if he should give away, or loan on terms yielding no income and not likely to insure punctual repayment, the means which good luck or prudent conduct had put in his hands; and that it would be wiser for him, with the cash he had, to extinguish so much as he could of the debt against him. And the United States has such means, and owes such debts. It owes over a billion and a quarter of dollars, which is running upon interest. It has the option to pay over three hundred millions of the debt whenever it pleases. It must pay the interest on the principal unpaid, at short intervals. It is not good sense, nor is it common prudence, to give away or loan its means, instead of using them to pay the debts against it, while, because of its abundant prosperity, it is easy to do so. There is neither direct nor consequential benefit to that body-politic, which is the United States, in the course that is proposed. A surplus is in hand. No way to use it so well, so directly and unerringly, as with it to pay off and take up that debt. It admits of no doubt that thus the people of the Union are well served, and their money so paid as to redound to their lasting advantage.

The ground upon which the proposition is based is, mainly, that of the good to be done to the people of the several States in the relief given to their financial straits and difficulties, whereby there may be more largely and effectually carried on, within the States and by State governments, enterprises purely domestic. This Department may not now, make lengthy discussion of this topic, in this feature of it. In the judgment of this Department, it is not a legitimate function of the Federal Government, to raise money by taxation to be donated to the States, or to thus use money already raised in that way. Nor is this uttered in ignorance or forgetfulness, of what men of might in the affairs and councils of the Union have heretofore done and said on this subject. It is to be borne in mind, that they spoke and acted upon an existing

surplus not needed for any public use then sanctioned by law; not upon a prospective one to be avoided by legislation; and in view of the temptation which that idle money, incapable of lawful use under any existing law, held out for the broaching of new, and, in their judgment, unwarranted, perhaps improvident, Governmental enterprises.

It is perhaps, enough for the present, that the payable debt of the Union can take up all surplus now existing, or likely to arise for four years to come.

Another proposition is, of a payment from the surplus to certain of the States which have not had their full proportion of money under the distribution act of 1836. This comes with dignity of presentation, inasmuch as two powerful States of the Union, Virginia and Arkansas, have seriously asked for such payment, making formal demand therefor. By the terms of that act, the money in the Treasury on January 1, 1837, over the sum of five millions of dollars reserved, was to be deposited with such of the States as would receive it on the conditions specified. One of the conditions was, that the State should pledge its faith for the safe-keeping of the moneys deposited, and repayment, when required by the Secretary of the Treasury for the wants thereof. It is not needed that there be made a minute analysis of the terms upon which, by the act, the then exceptional and anomalous surplus in the Treasury was to be placed with the States. It was not as a complete and lasting gift. It was as a loan or deposit temporary in its nature, liable to a demand for a return whenever the wants of the Federal Treasury needed a repayment. It is claimed that the transaction was a contract; that if the States would take, the United States should deposit. And it is argued that the States having consented to take, and having to an extent taken, and having because thereof made financial arrangements by which they were and still are bound and affected, it is incumbent upon the United States, now that there is a surplus in its Treasury over the ordinary expenditures needed for carrying on the Government, that it should make further deposit thereof, with the assenting States which have not had their quota of the sum found in surplusage in 1837. Be it so. Call it a contract. Yet there was another and a vital part of that contract, that the States should repay, whenever the wants of the Treasury forced it to call for repayment. Are there, then, those wants? I do not consider that this term "wants" is to be interpreted as meaning destitution, or absolute, pressing need not to be otherwise met. I conceive it to mean, that when the condition of the finances is such, as that the Treasury must resort to more than usual rate and mode of taxation, to get money for legitimate purposes of the Government, that then an exigency arises, when it may fairly be said to have "wants,"

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... that the act of 1836 might be repealed by Congress, for it says
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occurred, as impliedly repealing, *pro tanto*, the unexecuted part ...ibution of the surplus revenue provided for in the deposit ...23, 1836. The Executive, in 1837, in a message to Congress, ... the moneys deposited were needed to defray existing appro... they could be recalled, and recommended that the fourth in... should be withheld. By existing authority of law, tantamount ... existing appropriation, the Treasury Department is empowered ... the existing or arising surplus to redeem the debt. The Secre... of the Treasury, in 1837, in his report to Congress, recommended the withholding of the fourth instalment, asserting that it was not a debt, but a mere temporary disposal of a surplus. Those views were renewed in 1838. In the report from this Department in 1867 of receipts and expenditures, the balance in the Treasury on 30th June of that year is stated to be $199,289,180.73, and there was included therein the amounts deposited with the States, being $28,101,644.91. On January 28, 1861, the Secretary of the Treasury, in an official letter to the chairman of the Committee on Ways and Means, treating of the public debt and of the condition and resources of the Treasury, names the deposits as an available resource, either by a recall of them or as a pledge for the repayment of a loan.

For these reasons, and following in the practice of this Department, payment to those States from the existing surplus has been withheld, and will continue to be, until Congress directs another course.

CUSTOMS.

The revenue from customs for the fiscal year ending June 30, 1882, was	$220,410,730 25
That for the last fiscal year was	214,706,496 93
A decrease of	5,704,233 32

There was a decrease in the value of dutiable imports of $11,575,583; and in that of free goods of $3,808,692.

The duties collected at the port of New York during the last fiscal year were $147,082,333.23; at all other ports, $67,624,163.70.

This table gives the value of imports entered for consumption during the years ended June 30, 1882 and 1883, respectively:

	1882.	1883.
Dutiable	$505,491,967	$493,916,384
Free	210,721,981	206,913,289
Total	716,213,948	700,829,673

The following are the amounts of duty collected on the articles named during these years:

	1882.	1883.
1. Sugar, molasses, and confectionery	$49,207,279	$46,172,378
2. Wool, and manufactures of	29,253,016	32,320,893
3. Silk, manufactures of	22,633,137	19,654,946
4. Iron and steel, and manufactures of	24,175,547	16,590,504
5. Cotton, manufactures of	12,227,103	12,234,371
6. Wines and spirits and cordials	6,771,483	12,308,307

Charges of fraud and irregularity in the administration of the law enacted to carry out the treaty with Hawaii, so far as concerns the exemption of sugars from duty, having been made both in public bodies and in the public prints, I appointed a commission of three trustworthy persons, (one of whom was nominated by prominent representatives of the sugar trade at New York,) to go to San Francisco and Portland, Oregon, and, if necessary, to the Hawaiian Islands, to fully investigate the matter. They were given the fullest latitude to examine into all branches of the subject, and have executed the commission with intelligence, fidelity, and thoroughness.

Their report, which will be duly transmitted to Congress, fails to show that such charges have any foundation. It tends strongly to prove, that the character of the sugar imported from those Islands since the treaty went into operation, is essentially the same as that which was imported prior to the treaty, both as regards the grade of sugar admitted and its country of origin; and that the treaty has been fairly executed. The statement in the report that the sugar interest is largely other than American, has called forth from the Hawaiian government a counter statement, with a table showing that of $15,886,800 of assessed plantation property, over $10,000,000 is owned by American citizens. This large interest, it is claimed is growth from the treaty, and that it is profitable to the owners, many of whom are residents in this country.

The industry, and the free market opened, have given rise to a trade, in its nature and effects like our inter-State trade, covering a wide range of articles affecting profitably the American farmer, grocer, and manufacturer of small articles of household and farm use, as well as the larger manufactures in metals, and of machinery, and cottons. The exports in these commodities have so grown, that the trade of San Francisco with the Hawaiian Islands is its third in importance, being equalled only by

that with Great Britain and China, and exceeding that with Mexico, Australia, or British Columbia.*

Many of the articles of this trade, such as hay, grain, lumber, &c., are so bulky that they employ a shipping large in proportion to their value, and much of this is American.†

The impetus given to Hawaiian inter-island commerce, has also inured to the benefit of Americans, in calling for coasting steamers and sailing-vessels, which have been built in American ports.

The balance of trade growing from the earnings of American commerce—the commissions of merchants and bankers, and the profits of American citizens—is believed to be in favor of this country; as the course of exchange, as this Department is informed, is constantly against the Hawaiian remitter, to the extent of from 1½ to 2 per cent. To reconcile this with the statements of the values of exports from this country to Hawaii, and of the imports into this country from that, which show an excess of imports, the fact must be weighed that the commodities landed there from here have an added value when they reach there, from the cost of carriage which adheres to them. The carriage is by American vessels mostly, and the cost of carriage earned by our citizens should be put to that side of the account.

The report of the commission shows that but for the free entry awarded by the treaty, the revenue on the sugar imported would have been about $3,000,000, computed at an average duty of $3.18 per 100 pounds. Yet there is a countervailing benefit to our citizens. The increase in value of Hawaiian sugar has been but $1.57 per 100 pounds. As the sugar comes in free, it may not have been as strictly classified as that on which duty is assessed. That the consumer has received some benefit is thus shown, and this notion is confirmed by the market price of sugar in San Francisco before and since the treaty, being an average of 1½ cents per pound in favor of the consumer since the treaty. Thus

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* Export values of merchandise from San Francisco, for the year 1882, to the following countries:

Great Britain	$29,695,342
China and Hong-Kong	4,149,393
Hawaiian Islands	2,556,398
Mexico	2,371,548
Australia	1,645,544
British Columbia	1,248,447

The above figures are taken from the "San Francisco Journal of Commerce," annual edition, January 31, 1883.

† Number of vessels built in United States Pacific ports for coasting trade of the Islands: sailing-vessels, 25; steamers, 11; built in Atlantic ports for coasting, 1 steamer, of 1,000 tons; built in Atlantic ports for ocean service between San Francisco and Honolulu, 2 steamers, each 3,000 tons.

the loss in revenue is on a trade which might not exist but for this beneficent operation of the treaty.

By an act of Congress passed August 5, 1882, (chap. 389, sec. 5,) it was made the duty of the Secretary of the Treasury, to include in his estimates to Congress, a statement specifying in detail the number and class of officers and employés of every grade and nature, with the rate of compensation to each, that may, in his judgment, be necessary to properly conduct the business of collecting the revenue, at each port of entry in the United States, together with an estimate of the amounts required for contingent expenses at each of said ports, and for such additional expenses of the service as cannot be otherwise specifically provided for.

Assuming that the object of Congress in requiring this report, was to obtain estimates for specific appropriations to defray the expenses of collecting the revenue from customs in each district, so that there might be a repeal of the present law providing a permanent annual appropriation for that purpose, I caused examinations to be made of the several districts, by officers of this Department, in conjunction with local officers selected by collectors of customs.

As the result of these examinations, I had the honor to transmit to Congress, on 5th February, 1883, schedules showing the number and compensation of the employés recommended for each customs district and each port as then established. There have been some changes since, of little comparative importance, in the number and location of officers. These schedules, amended to fit with changes, are again transmitted, and marked respectively No. 1 and No. 2. No. 1 (see Appendix, page 81) shows existing districts and ports as recommended by those commissions, and the number and requisite compensation of officers and employés in each district and port. The aggregate amount of money required, as shown by that schedule, for the salaries of collectors and surveyors in all of the then existing districts and ports, was $6,650,781.42 yearly. It was stated that those officers were variously compensated—some by salaries, commissions, and fees, some by commissions and fees only, some by salaries only—and that the amount paid, was in some cases too small to insure the constant service of competent men, and that in others the salary and emoluments were excessive for the service rendered. It was shown that there are many districts in which no duties have been collected for years, and others in which the duties collected are not sufficient to pay the cost of collection. The labors of the officers in those districts are confined almost entirely to issuing documents to vessels, collecting hospital tax and fees, and making up monthly and quarterly returns to the Department, often of "no transactions."

Custom-house fees began with the act of March 2, 1799. It was thought that the customs service would be practically self-sustaining, and that the burden of its maintenance should fall on those who had dealings with it, with nominal salaries only, in addition to the fees. The system has not been self-supporting. The aggregate amount of fees collected is about $600,000 per annum; the annual cost of collecting the customs revenue is over $6,000,000.

These fees are made up of small and annoying exactions from importers and ship-owners, difficult to collect, and involving much unprofitable clerical work in accounts. Besides that, the sum of them, in instances, is so large as to compensate the officer beyond desert.

The advantage of fixed salaries is obvious. An objectionable feature of the present system is the temptation at small ports to obtain "additional compensation for storage" under the bonded warehouse system. Then, too, is the uncertainty of the amount of compensation. By the act of June 22, 1874, Congress recognized all this, and gave fixed salaries to the officers of leading ports, but left others unchanged.

The oaths required to be taken before collectors upon entry of merchandise are, as a rule, formal. They cause inconvenience to importers by compelling their personal attendance at the custom-house. They deter not the dishonest from fraudulent entries. They add not to the security of entries by honorable merchants. A simple declaration by the importer, attested by a notary, sanctioned by penalties, would prove a relief to merchants, and be as safe.

There are useless customs districts, and nothing but local pride or interest will disagree therefrom. There are twenty-two ports of entry at which not a dollar of duties has been collected for years, at different times. There are thirty-two ports of entry in which the year's collections from all sources have not equalled the year's expenses. These had importance when foreign trade was carried on in sailing-vessels, and before the concentration of importations at large ports from regular lines of ocean-steamers, and the present system of rapid inland transportation. The custom-houses in these districts are, however, kept up, with all the formalities of activity, with deputies, inspectors, and clerks, to make official returns to the accounting officers of the Treasury and the Bureau of Statistics.

The consolidation of districts and diminution of ports of entry are called for by sound business considerations, and may be accomplished without increasing smuggling or withdrawing proper facilities for documenting vessels.

The issuing of papers to vessels and the collection of hospital-dues may as well be done by subordinates, and the unproductive districts

abolished, saving expense and promoting the efficiency of the service. Owing to the inequalities in the present compensation of collectors and surveyors, and to the nature of some of these offices, sinecure, almost, it was found impracticable to adopt any uniform rule for fixing salaries of collectors and surveyors under the present organization.

I was then, and am now, convinced, upon a careful consideration of the subject, that districts should be consolidated, and the number thereof reduced. The matter is of such importance, as bearing upon an economical conduct of public affairs, that I presume to present it in this annual report, and to again offer my views and the facts and considerations which I think uphold them, and to renew the propositions which I then made.

The statement herewith submitted, marked "A," (see Appendix, page 111,) went with the letter, and exhibits the number at that time of employés and expense for salaries in each district as now constituted, and the estimated number of employés and expense for the districts as it is proposed that Congress should authorize them. In these respects it is near enough to a correct statement of the existing state of things to show it with closeness to accuracy. The number of officers and employés in the existing districts as given by it is 4,255. The number thought to be needed under the arrangement of districts proposed would be 4,054, the reduction being mostly of those receiving the largest compensation.

The actual cost of the service in the districts for the fiscal year ending June 30, 1882, is given as	$6,549,595 07
The estimate for the year ending June 30, 1884, with the districts remaining as they are, is stated at	6,650,781 42
The cost, if consolidation of districts as proposed is made, is estimated at	6,148,855 00

These figures show that the consolidation would save in public expenses $501,926.42 over the estimate for 1883–'84, and $400,740.07 over the ascertained cost of the year 1882–'83.

The estimates submitted according to law by this Department for the fiscal year 1884–'85 call for an appropriation of	$5,500,000 00

In addition thereto is the amount to come from the provision of the United States Revised Statutes, section 3687, which makes a permanent annual appropriation of $2,750,000 for the expenses of collecting the revenue from customs for each half year, in addition to such sums as may be received from fines, penalties, and forfeitures connected with the customs, and fees paid into the Treasury by customs officers, and from storage, cartage, drayage, labor, and services. In the year 1882 the

amount derived by the operation of this section increased the available funds to the sum of $7,566,688.24; in 1883, to $7,953,329.51. These figures are furnished to me from the warrant division of this Department. If they err at all, it is that they are less, rather than more, than they should be. Consolidation, according to the estimate above given, is, in expense, less than this nearly $1,500,000.

Schedule No. 2 (see Appendix, page 61) shows in detail the number, class, and pay of the officers for each of the proposed consolidated districts.

The name of each district is made the same as that of the chief port in it, thereby to save clerical labor at the customs offices and at the Department, and prevent the confusion among the unfamiliar arising from an arbitrary christening, as that of the Port of Oswegatchie, N. Y., when the chief port is Ogdensburg, N. Y. The pay of keepers of bonded warehouses has not been included in the estimates, because the number of them depends upon the number of warehouses, which varies, they being established or given up as it pleases the proprietors, who are required to reimburse the Government the stipend of the keepers. And in connection herewith, it is recommended that the proper appropriation bill have a clause appropriating the sum reimbursed therefor, and for overtime and night service when for benefit of consignees.

The plan outlined in schedule No. 2 is the result of much thought and careful inquiry. A test in practice may show some imperfections, and doubtless will. Alteration in the plan suggested, clearly in the way of improvement, may, from time to time, be needful. In the event of adoption of it by Congress, with the numbers and boundaries of districts fixed by enactment, the Executive could not apply an immediate remedy to evils that practice might show to exist. Hence, there may be doubts whether a system unchangeable, save by legislation, is the best mode for a practicable as well as an economical administration of the customs service. To forestall failure, the power could be given to the President, to alter districts and designate or appoint officers thereto, as is his power with internal-revenue collection districts, by section 3141 of United States Revised Statutes.

I further recommend a repeal of section 2648 of United States Revised Statutes, authorizing a charge for blanks by the collectors and surveyors on the northern, northeastern, and northwestern frontiers, and of all laws allowing commissions, fees, and charges for storage.

I also recommend that, in lieu of present salaries, and all moieties and perquisites, and commissions on disbursements, received by collectors, naval officers, and surveyors, there be an annual salary. To prepare for an occasion requiring the change of any salary in the recess

of Congress, the law might provide that one, not beyond a maximum named by law, might be fixed by the President, to be reported to Congress at the next session after his action, subject to its approval or change. I also recommend that section 3687, United States Revised Statutes, be repealed.

I send herewith maps,* which show the customs districts as they are, and as they would be if the consolidation herein proposed is effectuated. The space within the blue lines is an existing district; that within the red lines is a district as contemplated.

Schedule No. 2 also contains a draught of a bill (see Appendix, page 80) for carrying out this proposition and the general plan proposed.

In conclusion of this subject, I remark, that there are some considerations which appear to militate with the feasibility and good results of a consolidation. Two of them are these: There is a possibility that in some of the districts where little revenue is taken, there might be much smuggling but for the undemonstrative preventive effect of the known existence of officers, and the wholesome fear of detection thereby excited; and that in such districts there are the papers of vessels to be *viséd* and approved, making needful the presence of customs officers at a convenient nearness. It is believed, however, that even if these are of potency, it is not needful that officers of other than lesser degree and wages be retained, who may be subordinate to a central superior conveniently placed; and I think that the bill proposed fully provides for these contingencies.

The act approved March 3, 1883, entitled "An act to prevent the importation of adulterated and spurious teas," has been productive of good effects. It needs amendment in some particulars, to give officers full power to achieve the results intended.

A draught of a bill to accomplish that end will be submitted for the consideration of Congress.

The tariff enacted March 3, 1883, while it has given rise to some troublesome questions of administration, but fewer than were expected from a new law of this kind, has simplified official work. The schedules for cotton and silk fabrics are much plainer than those formerly existing on the same subject. The mode adopted for collecting duties on sugar according to its saccharine strength seems to have given general satisfaction, and has removed the opportunity formerly existing for evading the revenue by artificial coloring.

If there be legislation on the tariff at this session, an improvement might be made in the provision regarding third-class or carpet wools, either by fixing one rate of duty for them, regardless of value, or by

* The maps here referred to will be found in the Finance Report, H. Ex. Doc. No. 2, 48th Cong., 1st Sess.

having a broader contrast between the higher and lower classes. Now the duty is two and a half, or five, cents a pound, according as the value of the wool is over or under twelve cents a pound; and where the market value is close to twelve cents, as it is now, the temptation is strong to undervalue the wool, so as to bring it in at the lower rate of duty.

In connection herewith, it should be said, that changes in the modes of business have made undervaluations more frequent and difficult of prevention. It is found that foreign manufacturers of, or wholesale dealers in, many classes of merchandise, decline to sell or to furnish price-lists to American merchants. It turns out that those manufacturers or dealers have established business houses, or agencies, or special consignees in this country, to whom they make shipments exclusively. It is suspected—it might be said that it is found out—that in many cases the goods sent over to these representatives are invoiced below their actual value abroad. There is no risk in this of mercantile loss to the foreign consignor, as the interest is mutual of him and his representative; the latter pays not at the invoiced value, but accounts at the actual selling price, in which both have an interest. It is not easy for the Government appraiser to learn, in all cases, the real market value abroad, for price-lists have been withheld, and actual sales are supplanted by this process; and it is hard to maintain criminal or civil actions for fraud against the consignee, for it is not easy to prove that he had a hand in the fraudulent undervaluation. Legislation aimed at these practices is needed.

Section 7 of the act repeals sections 2907 and 2908 of the United States Revised Statutes and section 14 of the act of June 22, 1874, and forbids customs officers from finding the value of imported goods by an estimation of the charges imposed by those sections, or of the value of any coverings of any kind. It has caused much diversity of opinion in the interpretation of it, and much difficulty in application. What is meant by these terms of the act—"the usual and necessary sacks, crates, boxes, or covering of any kind"—has divers answers from the officials, and is the cause of contention with importers. Should Congress touch the tariff act at this session, this matter will be worthy of its attention.

The Secretary of the Treasury is required by section 4 of chapter 136 of the laws of 1875, to give in his annual report to Congress a detailed statement of the money refunded under any provisions of law for duties erroneously received, together with copies of the rulings under which the refundings were made. It has been the practice of the Department to submit the information in a separate communication. That practice is followed this year.

INTERNAL REVENUE.

From the various objects of taxation under the internal-revenue laws, as reported by the Commissioner of Internal Revenue, the receipts for the fiscal years ended June 30, 1882 and 1883, were as follows:

Objects of taxation.	Fiscal year ended June 30—	
	1882.	1883.
Distilled spirits	$69,873,408 18	$74,368,775 20
Tobacco	47,391,988 91	42,104,249 79
Fermented liquors	16,153,920 42	16,900,615 81
Banks and bankers	5,253,458 47	3,748,994 60
Adhesive stamps:		
Bank-checks	2,318,455 14	1,946,272 10
Friction-matches	3,272,258 00	2,920,545 20
Patent medicines, &c.	1,978,395 56	2,186,236 16
Penalties	199,830 04	305,803 57
Collections not otherwise provided for	81,559 00	71,852 43
Total	146,523,273 72	144,553,344 86

The increase of revenue from spirits during the last fiscal year was $4,495,367.02; from fermented liquors was $746,695.39; the decrease from tobacco, $5,287,739.12; and from banks and bankers, $1,504,463.87. The total decrease of internal revenue from all sources up to June 30, 1883, was $1,969,928.86. These figures differ somewhat from the amounts actually covered into the Treasury, as shown on the first page of this report.

The cost of collecting the internal revenue for the fiscal year was $5,113,734.88. The estimated cost for the same work for the current year is $4,999,190.

The following statement shows the number and amount of claims presented for rebate of taxes on tobacco, snuff, cigars, and cigarettes, under the provisions of section 4 of the act of March 3, 1883, and the present condition of the claims:

Whole number of claims presented	46,859
Amount of rebate claimed	$3,725,913 97
Number of claims allowed and forwarded to Fifth Auditor	43,729
Number of claims rejected	56
Number returned for amendment	3,074
Total	46,859
Amount of claims allowed and forwarded to Fifth Auditor	$3,524,167 22

Amount of claims rejected	$1,787 48
Amount returned for amendment	199,959 27
Total	3,725,913 97
Manufacturers' claims, 846; amounting to	$137,576 94
Dealers' claims, 46,013; amounting to	3,588,337 03
Total	3,725,913 97

The claims of manufacturers have all been allowed.

The claims rejected and claims returned for amendment are claims of dealers.

No appropriation having been made for the payment of the claims of dealers for the rebate, the attention of Congress is respectfully called to the subject. It will be seen that the sum required to pay the claims of dealers which have not been rejected (viz., 45,957 claims) is $3,586,549.55.

PRODUCTION OF SPIRITS.

The quantity of spirits produced and deposited in distillery warehouses during the fiscal year ended June 30, 1883, is less than the production of 1882 by 31,839,853, and of 1881 by 43,714,842 gallons.

The decrease in production of the fiscal year 1883, as compared with that of the fiscal year 1882, is distributed among the different kinds known to the trade, as follows:

Decrease in production of—		Gallons.
Bourbon whiskey		20,913,422
Rye whiskey		4,440,123
Alcohol		4,482,965
Gin		23,366
High wines		2,260,428
Miscellaneous		241,385
Total decrease		32,361,689
Increase in production of—		
Rum	97,876	
Pure neutral or cologne spirits	423,960	
Total		521,836
Net decrease		31,839,853

There were remaining in distillery warehouses on the 30th of June, 1883, and the 30th of June, 1882, respectively, distilled spirits as follows:

	Gallons.
June 30, 1883	80,499,993
June 30, 1882	89,962,645

There should, under the present law, come out of bonded warehouse and pay tax, distilled spirits as follows:

	Gallons.
By June 6, 1884	26,104,531
By July 6, 1884	3,495,512
Total	29,600,043

On which the tax would be $26,640,038.70. The whole quantity in bonded warehouses to come out, and pay tax by July 6, 1886, is 80,499,993 gallons, at a tax of 90 cents per gallon.

This has some bearing on the probable amount of surplus revenue, should there be legislation affecting the payment or postponement of that tax.

The Commissioner of Internal Revenue recommends that the limitation to prosecutions for violations of internal-revenue laws be made two years in all cases, subject to the exceptions usual in statutes. The information of his bureau is, that in nearly all proceedings instituted after two years, the accused is acquitted.

He calls attention to the use of alcoholic vapor in the manufacture of vinegar. He suggests the need of legislation preventive of frauds therein. That which seems the best, is to subject the manufacturers to the same regulations which are made by law for the distillers of spirits, so far as they may be applied. His report speaks of the direct taxes levied under the act of August 5, 1861, and of the doubts which have arisen whether the internal revenue have operation in the Indian Territory. These matters are of such importance as to be especially commended to the early attention of Congress. It is worthy, too, of consideration whether amnesty should not be given to a class of offenders against the internal-revenue laws, which will be intelligibly indicated by the phrase "moonshiners," excepting, however, all cases in which disobedience of the law has run to violent opposition to the enforcement of it.

REDUCTION OF TAXATION.

The only United States bonds which are now payable at the pleasure of the Government are the three per cents, being $305,529,000; those which next become redeemable are the $250,000,000 of four-and-a-half

per cents, on September 1, 1891. The $737,620,700 of four per cents and the $325,850 of refunding certificates are redeemable July 1, 1907.

The estimates for the fiscal year ending June 30, 1884, show a surplus revenue of $85,000,000 per annum. This is enough to pay all the three per cents in about three and one-half years, and before the close of the fiscal year ending June 30, 1887. This surplus kept up for the four succeeding years, to September 1, 1891, would be more than $350,000,000, or $100,000,000 more than enough to pay all the bonds then falling due. The same annual surplus until July 1, 1907, would amount, with the $100,000,000 left after paying the four-and-a-half per cents, to about $1,460,000,000, while the whole amount of the debt then redeemable is less than $740,000,000. The estimated surplus of $85,000,000 a year would pay the whole amount of the interest-bearing debt in about fifteen years. The only authority possessed by the Treasury whereby it can restore to business the surplus moneys thus accumulated, is that given to the Secretary by the act of March 3, 1881, by which he may at any time apply the surplus money in the Treasury not otherwise appropriated, to the purchase or redemption of United States bonds. This can now be done to other than the three per cents only by the payment of a large and increasing premium thereupon. And when it is considered that nearly one-half of the interest-bearing debt of the United States is held by national banks, State banks, savings-banks, and trust companies, and much other of it by private trustees and other persons acting in fiduciary capacity, who have no wish to surrender these securities, the difficulty of acting under the provision cited is manifest. Moreover, it cannot be assumed that the estimated surplus for the current and next years under existing laws, will remain at the same rate in succeeding years. The increasing population and swelling business of the country will add to, rather than take from, the amount of the surplus as now estimated, while the decrease of interest on the public debt, and probably of the amount disbursed by the pension bureau, as arrears of pensions are paid off, should diminish expenditures.

As a general principle, the good of the people requires that a public debt should be paid as soon as it may be without greatly onerous taxation, or disturbance of business interests which have been fostered, perhaps stimulated, by provisions of law once expedient. Though of the public debt resting upon us, it is to be considered that the object for which it was in the main incurred, was the good of coming generations, as well as of that which incurred it, and that it is not unjust to them that, reaping a measure of the benefits it purchased, they should bear their share of the burden of payment. But as our interest-bearing public debt is

over one billion and a quarter of dollars, ($1,312,446,050 in exact figures,) and about $250,000,000 and about $740,000,000 of it beyond our reach for payment, for about eight years and twenty-four years, respectively, and may not be brought in by purchase, save at heavy rates of premium, even if it can by paying those rates, there is forced upon our attention the question, how shall a heaped-up surplus of public money be avoided? The discussion of this question in former reports of this Department admits of but one consistent answer from it now; the views therein expressed have not been given up. There ought to be a reduction of taxation.

In connection herewith, it is proper to call attention to the statutes providing for a sinking-fund.

By the statutes re-enacted in sections 3694 and 3696 of United States Revised Statutes, it is provided that the coin paid for duties on imported goods shall be set apart as a special fund to be applied, first, to payment in coin of the interest on the bonds and notes of the United States; second, to the purchase or payment of one per cent. of the entire debt of the United States, to be made within each fiscal year, and, in addition thereto, an application to the payment of the public debt of an amount equal to the interest on all bonds belonging to the sinking-fund, as the Secretary of the Treasury shall from time to time direct. This obligation to regard the coin received for duties on imported goods, as a pledge for the gradual extinction of the national debt has been observed by this Department, and an account kept of the amounts applied from year to year to the sinking-fund, a detailed statement of which is submitted with this report.

It is assumed that this obligation entered into by the Government with its creditors, at a time when its bonds were regarded as of far less value in the market of the world than at the present time, will be held sacred until the debt is extinguished. It is true that the debt has been paid much more rapidly than it would have been, had only the amount of the sinking-fund been applied to its payment, but the obligation still remains, to set apart annually the amount required by law, to be applied to the extinguishment of the public debt. The payments from time to time of the amount thus required have varied somewhat, as the amount of the debt has unequally varied by a more or less rapid payment of it.

The estimate of the sinking-fund for the current fiscal year is fixed at $45,816,741.47, and the amount required will increase from year to year at the rate of about $1,000,000 until 1891. It is estimated that an average of about $50,000,000 each year until then, will be required for the sinking-fund. This will vary according to the amount actually applied in payment beyond the need of the sinking-fund.

I consider, therefore, that in legislating for the future, the revenues should not be so far reduced as to prevent the application each year of about $50,000,000 to the sinking-fund. Upon the estimate of $85,000,000 as the surplus for the current year, we find a surplus for that period of nearly $40,000,000, not wanted for the regular expenditures of the Government, or for the payment of the national debt through the sinking-fund.

So the question still presses, what legislation is necessary to relieve the people of unnecessary taxes? As elsewhere suggested, it should not be assumed that the surplus in the Treasury will be consumed by lavish expenditures for objects of doubtful expediency or legality, or that the scheme which has been proclaimed, of exacting money from the people for the purpose of returning it to them by filtering distribution through State governments, will find any favor with Congress or the people.

In the recommendations of the President and those of this Department, and the action of Congress, and in the expression of public opinion, there has been substantial concord as to how the needed reduction of the revenue should be brought about. It has been generally conceded that the internal-revenue taxes, except those upon spirits, fermented liquors, and upon the circulation of banks, might well be abolished. There has been difference whether the tax upon tobacco should be abolished or modified. There were but few advocates of the immediate total abolition of taxes upon spirits or fermented liquors. My last report said that taxes upon spirits and tobacco, being upon things not needful, should be retained rather than those upon the common necessaries of life; which, as a proposition, is not to be controverted. But it was conceded by all that a substantial reduction should be made upon nearly all imported articles subjected to duties.

To make a start in the proposed reduction of revenue from imports, the Tariff Commission had been created. In good faith it undertook the work. In its report to Congress it said: "Early in its deliberations the Commission became convinced that a substantial reduction of tariff duties is demanded, not by a mere indiscriminate popular clamor, but by the best conservative opinion of the country, including that which has in former times been most strenuous for the preservation of our national industrial defences. Such a reduction of the existing tariff, the Commission regards not only as a due recognition of public sentiment and a measure of justice to consumers, but one conducive to the general industrial prosperity, and which, though it may be temporarily inconvenient, will be ultimately beneficial to the special interests affected by

such reduction." Again: "Entertaining these views, the Commission has sought to present a scheme of tariff duties in which substantial reduction should be the distinguishing feature. The average reduction in rates, including that from the enlargement of the free list and the abolition of the duties on charges and commissions, at which the Commission has aimed, is not less on the average than 20 per cent., and it is the opinion of the Commission that the reduction will reach 25 per cent." And again: "It has been the effort of the Commission to make the reduction apply to commodities of necessary general consumption, and to diminish or withhold the reduction upon commodities of high cost, requiring more labor, and which, being consumed principally by the more wealthy classes, could bear higher duties, at the same time supplying revenue and encouraging the higher arts without being oppressive in their operation."

The Chairman of the Senate Committee on Finance, in explanation of the bill before the Senate last year, which after various amendments became a law, estimated at $45,000,000 the reduction of the revenue which would follow the changes in the tariff proposed thereby.

These intentions and calculations have not been verified.

The estimated receipts for the current year from customs are $195,000,000, a reduction of less than $20,000,000. Considering that there has been some depression of business during the past year and current year, it is probable, should business revive, that the revenues from customs under the present laws will in succeeding years increase rather than diminish.

It was estimated by the Senate committee that the repeal of internal-revenue taxes proposed by their bill would effect a reduction of $34,790,334. The Commissioner of Internal Revenue estimates that the aggregate amount of reduction made by the act will not be less than $43,000,000 per annum, including the six millions of taxes on deposits of national banks; but he further estimates that the increase of receipts from distilled spirits will so augment the revenues from that source as to make the aggregate receipts from internal revenue for this year $120,000,000, or about $24,500,000 less than those for the preceding year. The reduction, therefore, from all sources of internal revenue for the current year appears to be about $10,000,000 less than the reduction expected by the Senate committee. We have, then, a reduction of $30,000,000 less than was sought for and expected.

The question recurs: Shall we now seek again for that reduction which was not attained, and is it now advisable to attempt a reduction of the revenues for future years to arise from duties on imports?

There was general agreement that a substantial reduction of the tariff should be made. The estimates of the Tariff Commission and of the Senate committee show what was the contemplated reduction. The actual results so far obtained indicate that the reduction labored for has not been effected by the new tariff act. It is to be considered, too, that the failure is not to be charged to the increase of importations keeping up the amount of customs revenue. The statistics of our foreign commerce show that there has not been an increase chargeable therewith. As to the principles of reduction, if a revision be practicable, there seems to be little disagreement. The reduction should be made on articles entering into general consumption as necessaries—as sugar, molasses, and the like—rather than upon luxuries; upon raw materials, rather than manufactured, with due regard to the fostering of domestic industries and occupations, especially those not fully established. In the report of this Department last year, the reduction as applied to the principal classes of dutiable articles was considered somewhat in detail, and, adhering to the views there expressed, a repetition of them is unnecessary.

It may not be deemed expedient so soon to make again a revision of the tariff to effect a reduction.

And there are considerations which are apt upon this head. The new tariff act went into operation, in all its parts, on the 1st day of July, 1883. There has gone by since then but little over one-third of a fiscal year. It is a short time in which to learn with accuracy how so important and wide-reaching a law as that, touching all the business and industrial interests of the country, will permanently affect the revenues. It is known that in some respects the first effects of it may not be relied upon as stable. Wherein the provisions of it lessened the duties upon foreign articles, it stimulated importations thereof, immediately before the 1st day of July. The goods were put in bonded warehouse, to be withdrawn at once after that day, on payment of duties at the new rates. Wherein it increased the duties, (as it did in some instances, by new provisions to meet the adjudication of courts or the rulings of this Department,) it stimulated importations prior to the 1st day of July, 1883, with the purpose of taking the benefit of the lower rate prevalent up to that date. These accelerated importations were, as a natural result, followed by decreased importations of the same articles after the law took effect; so that the lasting effects of the application of it to the business of the country may not be known with reliable certainty, either in the general result upon the volume of revenue to be yielded by duties upon imports, or

in its particular results upon especial classes of goods and especial branches of domestic industry.

Again, it may be deemed needful to so legislate as to certain industries and businesses as to effect reduction or suspension of the revenue from the taxation upon them. Those making or trading in distilled spirits, or who have made loans or advances of money thereon, will be earnest in endeavor for an extension of the bonded period. It is not unlikely that Congress will listen to their appeal. An extension of the bonded period will effect a reduction of revenue for the length of time thereof. In another part of this report are data on which may be calculated how much that will be. On the whole, then, this Department does not recommend an immediate revision of the tariff act. It adheres, however, to its conviction, that ultimately the just and expedient method of relief from taxation, and of limiting the revenues to the needs of an economical Government, must be found in a reduction of the duties on imports.

In my report of last year it was suggested, that should it be deemed expedient to reduce the rate of taxes on spirits, tobacco, or fermented liquors to lessen the inducement to frauds, or to make them more equal, the objection is not so strong against moderate modification as against a total repeal of all taxes thereon. As has been seen, a reduction of the tax upon tobacco and its manufactured products has resulted in a decrease of revenue therefrom, fully as large as was expected by the committee which submitted the bill, and there is left but about $21,400,000 of revenue from that source. The estimated receipts from spirits, however, as has been seen, for the current year exceed the receipts for former years. The reason of the opposition to the reduction of the tax on distilled spirits is that they are not neccessaries of life. That principle may be still upheld, and yet the tax, in whole or in part, be taken from alcohol or spirits used in the manufactures and the arts. It has lately been estimated, that, subject to the tax, there were used in the manufactures and the arts 4,269,978 gallons annually; that if the tax were but 50 cents per gallon there would be used 5,297,224 gallons; and if there were no tax, 7,367,504. As the tax is 90 cents per gallon, the effect on the revenue of legislation to this end is easy to be foretold with approximation to accuracy. It would not be difficult to protect from pretended and fraudulent use of such a relaxation of the law. There is a method by which spirits are made unacceptable for other purpose; by "methylating" them, which is the using of a chemical substance with them, whereby they become distateful. There is a scientific process which will eliminate the methyl, but so prolix and costly as to

be practically of no use; and besides, it is a process of distillation which could easily be put under the laws and regulations now existing for the supervision of that business.

Propositions are made to repeal the whole system of internal revenue. As to this, I repeat my remark of last year: "I see no public sentiment or political action, indicating a desire on the part of tax-paying citizens to strike out this class of taxes."

All other internal-revenue taxes have been repealed, except that on fermented liquors, amounting, as estimated, to $17,900,000, and on the circulation of national banks. The repeal of the tax on bank circulation in whole or in part I have recommended. As the abolition of all internal-revenue taxes is a proposition which may be made and pressed, some data are here given. The spirits in bonded warehouse on June 30, 1883, are estimated at more than 80,000,000 gallons. The quantity of distilled spirits in the United States, besides that in customs bonded warehouses, on October 1, 1883, is estimated by the Commissioner of Internal Revenue as follows:

	Gallons.
In distillery and special bonded warehouses	73,847,103
In hands of wholesale liquor-dealers	13,921,482
In hands of retail liquor-dealers	28,180,650
Total	115,949,235

The quantity in bond upon which the tax is payable between November 14, 1883, and June 30, 1884, is 21,997,770 gallons, the tax on which is $19,797,993.

The quantity upon which the tax is payable during the fiscal year ending June 30, 1885, is 37,228,317 gallons, the tax on which is $33,505,475.

The quantity upon which the tax is payable during the fiscal year ending June 30, 1886, is 15,356,030 gallons, the tax on which is $13,820,427.

Elsewhere herein is given the quantity of distilled spirits in bonded warehouse, and which, under existing law, must pay tax before it is released, and other data of that kind. On the quantity in the hands of dealers, the tax enters into the cost and value of it to them. It may be assumed that neither the distiller, nor the owner of spirits in bond, nor the dealer owning it, wishes complete abolition of the tax upon it. The community, in its present temper, will not submissively receive

a law encouraging the manufacture of whiskey unrestricted in quantity.

A reduction of the tax on whiskey in bond to 50 cents a gallon would reduce the revenue about $7,600,000 for the current year, were the reduction to take effect from November 14, 1883, and about $13,500,000 in the year ending June 30, 1885.

In connection with this subject, it is deemed proper to call attention to the fact that the total number of gallons of distilled spirits produced in the year ended June 30, 1883, is estimated at 74,013,308, about 5,500,000 less than all in bonded warehouse June 30, 1883.

Owners of spirits in bond declare themselves unable to meet the payment of taxes thereon as they fall due. They have to some extent exported them rather than to pay tax. It is likely that they will again ask an extension of the time of payment of such taxes. They may ask for a repeal or modification of them.

The statistics given above are fit for attention, as well upon the question of the probable surplus in the Treasury as upon the need and propriety of legislative relief to the owners of spirits.

The estimates of receipts from taxes on distilled spirits adopted in this report include the taxes thereon falling due the current year, amounting to nearly $20,000,000.

FOREIGN COMMERCE.

The foreign commerce of the United States during the last fiscal year, including imports and exports of merchandise and specie, was as follows:

Exports:	Merchandise	$823,839,402
	Specie	31,820,333
		855,659,735
Imports:	Merchandise	$723,180,914
	Specie	28,489,391
		751,670,305
Imports and exports during the year ended June 30, 1883		$1,607,330,040
Imports and exports during the year ended June 30, 1882		1,567,071,700
Increase		40,258,340

The excess of exports of merchandise over imports thereof during the last eight years is shown as follows:

Year ended June 30—

1876	$79,643,481
1877	151,152,094
1878	257,814,234
1879	264,661,666
1880	167,683,912
1881	259,712,718
1882	25,902,683
1883	100,658,488

The value of exports of domestic merchandise during the year ended June 30, 1883, was $804,223,632, as against $733,239,732 during the preceding fiscal year, an increase of $70,983,900.

The following table shows the articles the exports of which materially increased during the last fiscal year:

Commodities.	1883.	1882.	Increase.
Animals, living	$10,789,268	$9,729,116	$1,060,152
Wheat and wheat-flour	174,703,800	149,304,773	25,399,027
Cotton	247,328,721	199,812,644	47,516,077
Hops	5,616,370	1,456,786	4,159,584
Iron and steel, and manufactures of	22,826,528	20,748,206	2,078,322
Beef, fresh	8,442,131	6,768,881	1,573,250
Sugar, refined	2,454,210	1,335,689	1,118,521
Wool, and manufactures of	26,793,708	24,012,028	2,781,680

The following table shows the articles the exports of which fell off materially during the last fiscal year:

Commodities.	1883.	1882.	Decrease.
Indian corn	$27,756,082	$28,845,830	$1,089,748
Leather	6,423,922	7,747,544	1,323,622
Mineral oil	44,913,079	51,232,706	6,319,627
Bacon and hams	38,155,952	46,675,774	8,519,822
Butter and cheese	13,425,191	16,923,545	3,498,354
Lard	26,618,048	28,975,902	2,357,854
Pork	6,192,268	7,201,270	1,009,002

The effects of the short crops during the season of 1881, consequent upon the protracted drought, and other unfavorable meteorological influences which prevailed during that season, not only tended to diminish the exports of the agricultural products of the country during the year ended June 30, 1882, but were felt far into the year ended June 30, 1883.

The value of the imports of merchandise into the United States dur- the year ended June 30, 1883, amounted to $723,180,914, as against $724,639,574 during the preceding fiscal year, a decrease of $1,458,660.

The following table shows the articles the imports of which materially increased during the last fiscal year:

Commodities.	1883.	1882.	Increase.
India-rubber and gutta-percha, crude	$15,511,066	$14,264,903	$1,246,163
Silk, raw	14,043,340	12,890,392	1,152,948
Tin, and manufactures of	23,917,837	21,641,173	2,276,664
Cotton, manufactures of	36,853,699	34,351,202	2,502,397
Earthen, stone, and china ware	8,620,527	6,979,659	1,640,868
Jute and other grasses, raw	5,994,429	4,710,192	1,284,237
Leather	8,235,053	7,029,041	1,206,012
Opium, and extract of	3,138,139	1,826,998	1,311,141
Tobacco, and manufactures of	11,771,596	9,347,762	2,423,834
Wine	9,979,026	7,559,258	2,420,368
Wool, manufactures of	44,274,952	37,361,520	6,913,430
Sugar, brown	91,516,804	90,065,218	1,451,586
Glass and glass-ware	7,762,543	6,634,371	1,128,172

The following table shows the articles the imports of which materially decreased during the last fiscal year:

Commodities.	1883.	1882.	Decrease.
Coffee	$42,050,513	$46,041,609	$3,991,096
Soda, nitrate of	2,336,661	3,911,545	1,574,884
Tea	17,302,849	19,392,102	2,089,253
Bread and breadstuffs	15,830,605	19,295,094	3,464,489
Fancy goods	7,801,874	9,695,262	1,893,388
Hemp, raw	4,927,269	6,110,152	1,182,883
Iron and steel, and manufactures of	40,796,007	51,377,633	10,581,626
Potatoes	1,092,211	4,660,120	3,567,909
Silk, manufactures of	36,764,276	38,985,567	2,221,291
Molasses	7,679,604	10,040,511	2,360,907

During the fiscal year ended June 30, 1883, the value of the exports of gold and silver coin and bullion amounted to $31,820,333, as against $49,417,479 during the preceding year, a decrease of $17,597,146, and the imports thereof amounted to $28,489,391, as against $42,472,390 during the preceding year, a falling off of $13,982,999.

There was during the fiscal year just closed an excess of exports over imports of gold and silver coin and bullion amounting to $3,330,942, as against $6,945,089 during the preceding year.

Of the merchandise imported into the United States during the fiscal year 1883, $136,002,290 were brought in American vessels, and $564,175,576 in foreign vessels, and $23,003,048 in railroad-cars and other land vehicles.

Of the exports of merchandise, $104,418,210 were shipped in American vessels, $694,331,348 in foreign vessels, and $25,089,844 in railroad-cars and other land vehicles.

TONNAGE OF VESSELS OF AMERICAN OWNERSHIP.

The tonnage of vessels owned in the United States at the close of the fiscal year 1883, according to the records of the Register of the Treasury, was 4,235,487.25 tons. Of this amount, 1,302,094.65 tons were, in 2,174

vessels, registered for the foreign trade, and 2,933,392.60, in 22,043 vessels, enrolled and licensed for the coasting trade and fisheries. There was an increase of 9,800 tons in vessels in the foreign trade, and 59,754 tons in domestic trade.

The following table shows the number and tonnage of vessels built and documented during the last fiscal year:

Kind.	Number.	Tonnage.
Sailing-vessels	721	137,046.17
Steam-vessels	439	170,229.78
Canal-boats	42	4,710.91
Barges	66	16,443.05
Total	1,268	265,429.91

The number of documented vessels of all classes built during the last fiscal year is less than that of the fiscal year ended in 1882 by 108.

DISTRIBUTION OF CARRYING TRADE.

Of the merchandise brought in at seaboard, lake, and river ports during the fiscal year 1883, an amount equal in value to $136,002,290 was imported in American vessels, and a value of $564,175,576 in foreign. Of the exports of merchandise, a value of $104,418,210 was shipped in American, and a value of $694,331,348 in foreign vessels. Of the combined imports and exports of merchandise, 15.54 per cent. was conveyed in American, and 81.35 per cent. in foreign vessels.

INCREASE OF OUR COMMERCIAL MARINE.

It will be seen from the statistical returns herein presented, that for many years past, of the exports and imports of merchandise, no greater part than an average amount of 16 per cent. has been borne in American vessels. This is, in a measure, due to the facility and security offered for investments of capital in domestic and inland commerce, and particularly in land transportation by railroad. The decline in the domestic tonnage of the Mississippi river and its tributaries may largely be set to this account. It is not an agreeable reflection that the freightage on 84 per cent. of our commercial imports and exports should be paid to alien ship-owners. Can this be helped by the removal of burdens laid by law? Of those now directly imposed by statutes on our vessels sailing foreign, there remain, besides clearance, entry, and admeasurement fees, only the tax of 30 cents per ton, payable once a year on entry from a foreign port. Vessels in the domestic trade have for many years been exempted from tonnage-tax. The income from this tax for the last fiscal year was $1,320,590.80. Of this amount,

$1,057,961.60 were paid by foreign vessels. Even though so large a proportion is thus paid, it is well deserving of consideration whether it is not advisable to return to the policy adopted in 1831, and entirely abolish the tax. It presses more heavily than any other upon our foreign-going shipping.

The burdens imposed by the States in the way of pilotage are considerable. Of this subject Congress has never taken control. The charges on shipping on account of pilotage, vary with every port. The extent of the embarrassments arising to commerce from this cause can be fully understood and remedied only when Congress shall take entire control of the subject; as, it is believed, it has the power to do.

Against the general abolition of entrance, clearance, and admeasurement fees, there exists the objection that a portion of the wages of customs officers are at present paid from them, and their abolition would entail the payment of fixed salaries in the place of payment by perquisites. If my recommendation in another part of this report for a discontinuance of these fees and for payment by prefixed salaries be adopted, this objection will cease.

The removal of these burdens will tend in some degree to an increase in our foreign-going shipping.

There appear but two methods by which our foreign shipping can be directly increased, namely, by subsidies, and by allowing the free purchase of foreign ships. Whether either or both of these means shall be adopted, will depend on the judgment of Congress whether it is better to resort to them, than to suffer the yearly loss of 84 per cent. of the freightage on exported and imported merchandise.

It would facilitate the solution of questions of the character above presented if there were established in the Treasury Department a bureau of navigation, whose function it should be to supervise that interest, make a study of its needs, observe its decline or increase, and recommend from time to time such measures as would keep it in a state of progress parallel with the general advance of the country. If such a bureau were to do nothing more than to look to the interests of seamen, and keep a record of the commercial marine, and guard against the physical obstructions to navigation within our own waters, its existence would be justified. Some of the duties which would naturally attach to such a bureau are now incongruously distributed among divisions of the Treasury Department, whose prime purpose and main work are of other nature. The establishment of that bureau might be effected with the addition of but two salaried officers to the present number in the civil service.

QUARANTINE OF NEAT-CATTLE.

The appropriations, under which this Department has established regulations for the quarantine of imported neat-cattle, are limited in their use to the prevention of the disease known as pleuropneumonia, or lung plague. Quarantine stations have been established for the ports of Portland, Me., Boston, New York city, and Baltimore. Suitable accommodations in sheds and yards have been provided for about 215 full-grown cattle at Portland, 700 at Boston, 450 at New York, and 550 at Baltimore.

The importations for the current year have been much larger than were expected from the importations of former years. More than 1,100 head were at one time quarantined at the port of Boston, and the importations at Baltimore have been about 900 head, which exceed the importations of the previous six years combined. It is believed that the accommodations at the ports named are sufficient for any demand that is likely to occur during the next year.

It is deemed essential to the protection of our herds and flocks from infection with the "foot and mouth" disease, that authority be conferred upon the Department to enforce a quarantine against sheep, swine, and goats also; as this disease is as liable to be communicated by them as by neat-cattle. There is no law authorizing the quarantining of any animals except neat-cattle. In one case, at least, the foot and mouth disease was brought in, but, the quarantine system detecting it, its spread was effectually prevented.

It is believed that the knowledge that our Government is enforcing a rigid quarantine, to prevent the importation of contagious diseases from abroad, is already exercising a salutary effect upon public opinion in Great Britain. Perseverance in it, is likely to induce Great Britain to rescind her order for immediate slaughter of cattle exported thither from the United States, which is a hinderance to our exporters.

The efforts of the Cattle Commission during the past year, have been mainly directed towards perfecting the details of our quarantine system, and ascertaining, as far as possible, the precise localities in which pleuropneumonia has existed, and enlisting the co-operation of the several State authorities in preventive measures. Under existing laws this is a task. It is difficult for one State to effectually rid its borders of this disease, so long as the transportation of cattle from another State, infected, to any place at will, is permitted.

It is advised by the Cattle Commission, one of whom has investigated the subject in Great Britain during the past summer, that provision be made for the previous domestic inspection of cattle exported from the

United States to that country, and that proper regulations be provided for the kind and healthful accommodation of them on their voyage. It would be well for that inspection to be made in co-operation, by officers of our Government and agents of the British Government, and at the port of departure just before shipment. If Great Britain will join in this, a certificate of health from such a board will give confidence abroad, and tend to a profitable solution of pending difficulties. Legislation for this purpose may be deemed necessary. A detailed report of the work of the Cattle Commission will be submitted to Congress early in the session.

REVENUE MARINE.

This service continues to perform satisfactory work. Its vessels, which now number 38, have cruised during the fiscal year an aggregate of 300,880 miles, and have boarded and examined 25,587 vessels, of which 2,240 have been seized, or reported to the proper authorities, for violating the law in some respect.

In relief-work they have been particularly efficient, having assisted 224 vessels in distress, which, with their cargoes, aggregated in value $4,885,175, and on board which were 2,497 persons. Sixty people have been picked out of the water and saved from drowning. One revenue-steamer alone assisted 76 merchantmen, valued, with their cargoes, at $1,493,020.

Prominent amongst the special work of this service are its co-operation with the Marine-Hospital Service in maintaining the national quarantine against the cholera and yellow-fever at the entrance to the Chesapeake Bay and in the waters of the Gulf of Mexico, five of the vessels participating in the duty; the rendering of assistance to the Light-House Establishment and to the Life-Saving Service, and the conveyance for the Navy Department of presents, provided by Congress, to the Tchuktchis Indians, in Siberia.

The revenue-steamer "Corwin," under the law providing for the use of revenue-steamers in protecting the seal-fisheries and the Government's interests generally in Alaska, has cruised extensively in the northernmost waters of the country. While in the Arctic, her commander, Captain Healy, by boat expeditions in August last, made a partial exploration of a hitherto unknown river of Alaska, and delineated the shores of a large lagoon.

The reports show the gratifying fact that under the vigilant cruising of the revenue-cutters in Alaskan waters, the illicit selling to the natives, of fire-arms and spirits by the masters of lawless trading-vessels,

has much fallen off, these operations being now confined principally to the Siberian coast.

The rebuilding on Lake Erie, of iron, of the revenue-steamer "Fessenden," authorized by Congress in 1882, has been completed, and the vessel, one of the finest of the fleet, placed upon her station. The two small steam-vessels authorized by Congress for harbor duty at Galveston and Mobile have also been provided, and are about to be put on active duty.

Four vessels of the Service have been provided with new boilers and somewhat extensively repaired in the hulls.

The revenue-steamer "Rush," at San Francisco, is in need of a new boiler and very general repairs to hull and machinery. It is believed that the better policy would be to build a new hull, and accordingly the sum of $90,000 has been included in the estimates for this purpose.

I renew the recommendations of two former reports that $75,000 be appropriated for a new vessel, of iron, for duty on the southern coast, to replace one now worn-out and not worth repairing.

I also renew the recommendation that provision be made for a vessel specially adapted to cruising in arctic waters. The "Corwin," now engaged in this duty, will soon need considerable repairs. She is, besides, too limited in coal-carrying capacity for the long reaches involved in her cruising, this defect often compelling her to turn back from important work and seek port for fuel. In view of the unorganized condition, as well as the growing importance, of this great Territory, whose protection in almost the whole extent of its coast line, is now devolved upon the vessels of the Revenue Marine, a new steamer specially designed for the work is demanded, and the attention of Congress is earnestly invited to the subject.

The expenses of this service for the fiscal year last past were $853,553.83.

LIFE-SAVING SERVICE.

During the past year this service has made its usual excellent record.

At the close of the year the stations numbered 194. The number of disasters to documented vessels within the field of their operations was 300. On board these vessels there were 3,792 persons, of whom 3,777 were saved; the others were lost. The number of shipwrecked persons succored at the stations was 651, and the number of days' relief afforded them in the aggregate was 1,879. The estimated value of property involved was $7,176,540, of which $5,611,800 was saved; the rest was lost. The number of vessels totally lost was 68.

There were also 116 disasters to smaller craft, as sail-boats, row-boats, &c., on which were 244 persons, 240 of whom were saved, and 4 lost.

The property involved in these instances was $66,180, of which $59,900 was saved, and $6,280 lost.

The following is the aggregate:

Total number of disasters	416
Total value of property involved	$7,242,720
Total value of property saved	$5,671,700
Total value of property lost	$1,571,020
Total number of persons on board	4,036
Total number of persons saved	4,017
Total number of persons lost	19
Total number of shipwrecked persons succored at stations	651
Total number of days' succor afforded	1,879
Total number of vessels lost	68

In addition to the persons saved from vessels, 22 were rescued from drowning who had fallen from piers, wharves, &c., and would have probably perished without this aid.

Of the small number of persons lost during the year within the scope of station operations, seven, who might otherwise have been saved, perished in attempting to reach the shore without aid, and the remainder under circumstances beyond human intervention. In every case of loss of life, the life-saving crews were blameless, as shown by investigation. The expense of maintaining the service for the year was $703,133.35.

Since the date of the last report, seven additional stations have been completed, at Hunniwell's Beach, Maine; at Muskeget Island and Coskaty, on the coast of Massachusetts; at Brigantine Beach, New Jersey; at New Inlet, at Cape Hatteras, and at Ocracoke, coast of North Carolina. Four stations are in process of construction, approaching completion, at Lewes, Delaware; at North Beach, Maryland; at Wallop's Beach, and at Parramore's Beach, Virginia. Sites have been selected for nine others on various parts of the coast, all of which, with possibly one exception, will be donated to the Government.

An exhibit of the life-saving appliances of the service was made during the year at the International Fisheries Exposition, held at London, by invitation of the British government. It attracted great attention, and was a marked feature of the exposition.

The law excluding the influence of partisan politics from the Life-Saving Service has been obeyed, with good results in the promotion of efficiency. Relief has been afforded to the Department by this statute. It has been a barrier against importunities, and enabled a management with an eye single to the public interest.

LIGHT-HOUSE ESTABLISHMENT.

During the fiscal year, the Light-House Establishment has put into operation 8 new light-stations, 112 new river lights, 2 new fog-signals, operated by steam or hot air, 7 new automatic whistling buoys, 6 new bell buoys, and 48 new buoys of the ordinary kind. It has discontinued three lights which were not needed, and has changed the characteristics of thirteen others, that they may be more useful than heretofore.

The board is now engaged in the erection of a light-house on North West Seal Rock, off Point St. George, California. This rock is in the open ocean, twelve miles from a harbor, and at its top but 54 feet above the sea. This is perhaps the most difficult and important work the board has undertaken for many years.

The lighted buoy placed last year to mark one of the channels leading into New York bay was so satisfactory to mariners that other buoys of the same kind have been obtained, and will, if possible, be placed to mark the shoals off Cape Hatteras and Cape Lookout, North Carolina. Meantime, the board is testing a lighted buoy of another make, with a view, if it is found satisfactory, to use both, or that one of the two which shall be found most satisfactory under all circumstances.

The board, during the past year, has constructed at its shops a lamp of the largest size capable of burning mineral oil. A long and severe practical test in one of its most important light-houses gives satisfactory results. Mineral oil will probably soon displace lard-oil as an illuminant in light-houses of this country.

Owing to the difficulty of obtaining a proper site, there has been delay in erecting an electric light at Hell Gate, New York. The light will probably be in operation by January next, when the experiment of illuminating a narrow channel by that means will be tried for the first time in any country.

Attention is called to the board's annual report for further details in regard to the Light-House Service.

COAST AND GEODETIC SURVEY.

The operations of this service have been efficient and successful. The progress of the work is equal with the means given by Congress. Twenty-eight new charts have been published, and hundreds heretofore published have been added to and corrected. The "Coast Pilot" has made progress, tide-tables and a map of the variation of the compass throughout the United States have been published of accuracy and extent beyond what has heretofore been done.

The Superintendent recommends an increase in the appropriation for surveys to bring the results of field-work into proper economic relation to the expenditures for outfit and transportation. This work is one of progress and development. It can best be prosecuted during a time of peace and prosperity. The representations made by the Superintendent in his report, herewith submitted, are worthy of consideration by Congress.

MARINE-HOSPITAL SERVICE.

During the last fiscal year, 40,195 patients received relief—13,356 were treated in hospitals and 26,839 at the dispensaries. The usual number of surgical appliances and orders for transportation were furnished. The receipts from all sources were $420,000.15, and the expenditures $469,966.21. This includes $35,440.92 which were expended on account of extraordinary alterations and repairs to hospital buildings. Of the hospital patients treated 9,019 recovered, 2,855 were improved, 197 remained unaffected by treatment, 502 died. There were 2,686 persons physically examined by officers of the service at relief-stations, some of them preliminary to shipment in the Merchant-Marine, Revenue-Marine, and Light-House Services, and to enlistment in the Life-Saving Service. The larger number (2,171) were applicants for pilots' license, examined for color-blindness. There have been no objections made to this examination, or appeals taken, within the year. Sixty-three of the pilots were found to be color-blind, and accordingly rejected. The examinations should extend to the hearing as well as vision, inasmuch as ability to recognize the sound of escaping steam and of whistles is a necessary qualification for an efficient pilot. Extensive repairs have been made to the hospital buildings, and their general condition has been improved.

Governmental quarantines have been maintained under the appropriation acts of 1882 and 1883, placing in each, $100,000 at the disposal of the President in case of a threatened or actual epidemic, to be expended in his discretion for preventing and suppressing the spread of epidemics and the establishment of quarantine at points of danger. And the power conferred has been availed of with good results, and the available balance on hand is $115,000. Unless the recommendation of the Surgeon-General for the establishment of yellow-fever hospitals at cities likely to be infected is adopted, no appropriation for the ordinary expenses will be required during the coming fiscal year, except for the quarantine plant as follows:

Gulf Quarantine.

Condemnation of site and erection of hospital	$50,000
Warehouse	5,000
Wharf	10,000

South Atlantic Quarantine.

Sapelo Station, Blackbeard Island	$25,000

Cape Charles Quarantine.

Site, buildings, and wharf	$50,000

A serious epidemic of cholera having prevailed during the year in certain rag-exporting countries, apprehensions were felt that unrestricted importation of rags would bring hither the germs of the disease, and, in the absence of specific authority, the Secretary assumed that he had power, under the appropriation act of 1883, to prevent the entry into American ports of rags suspected of being infected. Collectors of customs were directed to deny an entry of such rags until the local health officer of the port should give a certificate of no danger.

The recommendations heretofore made for the establishment of a national snug harbor, and for regulations by law for the appointment of medical officers of the Marine-Hospital Service, is respectfully renewed. Attention is invited to the accumulation in the Treasury of unclaimed money of deceased seamen, and especially to the fact of jewelry, watches, and other unclaimed effects of seamen remaining in the hands of collectors of customs. It is recommended that, under proper restrictions, these be sold, and the proceeds, together with moneys now in the Treasury on this account, be covered in to the credit of the hospital-fund. The Surgeon-General recommends the purchase of the seamen's retreat property, on Staten Island, as a marine hospital for the port of New York, and the building is now so used under a temporary lease. I concur in the recommendation for an appropriation for that purpose.

The success of national quarantine has been shown during the past two years.

Full details of the operations of the service in all its branches will be found in the annual report of the service, herewith transmitted, and several recommendations, to which I ask Congressional attention, besides any of which special notice is taken above.

NATIONAL BOARD OF HEALTH.

The National Board of Health expended $97,332.60, of which sum $34,687.67 was for work in progress at the close of the last fiscal year and $62,644.93 are chargeable to the appropriation for the fiscal year

ending June 30, 1883. While a liberal construction has been given to the laws relating to sanitary work, the board has been held to strict accountability for all moneys appropriated for its use.

On the 2d of June last the act of June 2, 1879, to prevent the introduction of contagious or infectious diseases, expired by limitation. There is now no legislation immediately to the same end. Whether there be need of re-enacting any or all of the provisions of the act of June 2, 1879, it is for Congress to determine.

The report of the board will show its views on this and kindred subjects.

STEAMBOAT-INSPECTION SERVICE.

These are the statistics of this service for the last fiscal year:

Divisions.	No. of steamers.	Tonnage.	Officers licensed.
Pacific coast	359	130,794.11	1,527
Atlantic coast	2,379	605,058.40	9,360
Western rivers	952	198,028.64	5,369
Northern lakes	1,270	315,972.82	4,374
Gulf coast	373	85,078.07	2,162
Total	5,333	1,334,932.04	23,292

Increase over the preceding year—

In number of vessels	216
In tonnage	56,367.41
In number of officers	2,825

Receipts.

From steam-vessels	$172,642 44
From licenses to officers	11,546 00
Total	184,189 44

Expenses.

Salaries of inspectors and clerks	$202,424 74
Travelling and miscellaneous expenses	41,613 03
Total	244,037 77

Excess of expenditures over receipts	$59,849 33
Decrease in receipts from steam-vessels below 1882	5,198 86
Decrease in receipts from officers' licenses	90,502 00

The decrease in receipts for the inspection of steam-vessels is accounted for by the acts of Congress approved respectively on August 5, 1882, and March 3, 1883, the first act making large reductions in the tonnage of steamers on which the fees are collected, the second reducing the fees on steam pleasure-vessels about 75 per cent. It is estimated that the aggregate reduction in receipts for the causes stated will approximate $18,000 annually.

The cause for the decrease in receipts for officers' licenses is explained by the act of Congress approved April 5, 1882, reducing such fees from $10 and $5 each, according to grade, to 50 cents each for all grades. The unexpended surplus of $639,245.93 standing to the credit of the inspection service will cover all deficiencies during the next ten years, even though there should be no increase in the receipts.

The number of accidents to steam-vessels during the year resulting in loss of life was 34:

From explosions	12
From fire	5
From collisions	11
From snags, wrecks, and sinking	6

The number of lives lost from various causes during the year was 284:

From explosions	69
From fire	45
From collisions	82
From snags, wrecks, and sinking	50
From accidental drowning	33
Miscellaneous causes	5

An increase over the previous year of 79. The greatest increase is from accidents caused by collisions.

Inspection of foreign passenger steam-vessels, under act approved August 7, 1882.

Active work under this act commenced at the beginning of the last quarter of the fiscal year. During the three months ended June 30, 1883, there were inspected 149 steamers, as follows:

Port of New York	103
Port of Boston	6
Port of Philadelphia	6
Port of Baltimore	20
Port of New Orleans	7
Port of San Francisco	7

There are sixteen inspectors and two clerks attached to this service, incurring during their services for a part of the year the following expenditures:

Salaries of inspectors and clerks	$17,446 48
Furniture for the various offices	2,045 49
Instruments for the use of officers	347 11
Travelling and miscellaneous expenses	679 86
Total	20,518 94

Several explosions of boilers of steam-vessels in the domestic trade have of late called public attention to this service. Doubts have been expressed whether the laws on this subject are well adapted to secure the result desired. The laws are somewhat prolix, and revision, amendment, and simplification would be of benefit; yet the vigilant and thorough practical administration of them is what will be of the most service, and diligence should be directed thereto.

DISTINCTIVE PAPER.

The distinctive silk-threaded fibre paper adopted in 1879, as described in the report for that year, continues to give satisfaction, and is used for all notes, bonds, certificates, checks, and other obligations of the Government.

To June 30, 1883, the automatic register at the mill showed a total registration since the manufacture of the paper was begun, in 1879, of 48,211,250 sheets. Of these, 41,952,950 perfect sheets have been received at the Department and fully accounted for, the balance being destroyed at the mill as imperfect. During the last fiscal year there have been received from the mill 13,925,000 sheets, and 10,871,312 sheets have been delivered to the printer for the printing of various securities. The printer has returned during that period 9,611,877½ perfect, and 534,055 imperfect sheets.

At the close of the fiscal year there were in the Secretary's office, subject to requisition, 12,059,614 sheets, and in the Bureau of Engraving and Printing, in process of printing, 1,505,203½ sheets.

The paper used for internal-revenue stamps is made without a distinctive fibre, its distinctive feature consisting of a water-mark of the letters "U. S. I. R." During the last fiscal year the Department received from the manufacturers 20,407,000 sheets of this paper, and delivered to the printer 24,242,948½ sheets. The Bureau of Engraving and Printing delivered during the fiscal year 22,954,816 perfect, and 668,901 imperfect sheets. At the close of the fiscal year there were in

the Secretary's office, subject to requisition, 13,810,357 sheets, and in printer's hands, in process of printing, 1,669,769 sheets. A full exhibit will be found in the accompanying tables.

The paper issued by the Secretary's office during the last fiscal year, to be returned to the Department imprinted, was for securities as follows: United States notes, $88,829,520; silver certificates, $51,870,000; gold certificates, $216,360,000; United States bonds, $600,715,100; national currency, series 1875, $61,935,300; national currency, series 1882, $52,784,250—total, $1,072,494,170.

Received from the bureau imprinted, perfect: United States notes, $80,916,000; silver certificates, $49,120,000; gold certificates, $195,260,000; United States bonds, $570,450,000; national currency, series 1875, $54,003,320; national currency, series 1882, $41,068,160—total, $990,817,480.

Received imprinted, imperfect: United States notes, $3,390,904; silver certificates, $2,089,760; gold certificates, $14,846,440; United States bonds, $29,716,650; national currency, series 1875, $6,086,700; national currency, series 1882, $2,685,310—total, $58,815,764.

COUNT, EXAMINATION, AND DESTRUCTION OF REDEEMED AND UNISSUED SECURITIES.

The redeemed United States notes, national-bank currency, and miscellaneous securities received by this office during the fiscal year ended June 30, 1883, for final count and destruction amounted to $217,282,457.51, and the United States notes, national-bank currency, and other obligations mutilated in printing, and unissued United States bonds and national-bank currency received for destruction amounted to $370,376,674, or an aggregate of securities destroyed amounting to $587,659,131.51; of which amount, $311,274,800 were in United States bonds, which were no longer required for the purpose of issue. Details of the above will be found in the tables accompanying this report.

BUREAU OF ENGRAVING AND PRINTING.

The service in connection with this bureau has, by an increase in the number of presses, in the stock of unfinished work and material on hand, and in other ways, been greatly improved during the year. The building used by it does not furnish sufficient space for the convenient execution of the work. The space for each press is too limited. The printing-rooms are crowded, the number of employés required for the work is too many for good health. Other deficiencies are stated in the

report of the chief of that bureau. The work has much increased since it began in this building. An increase to the extent reached was not foreseen. The matter of an enlargement of the building will be submitted to Congress during the session.

PUBLIC BUILDINGS.

During the last year, work has been in progress upon twenty-seven bulidings, under direction of the Supervising Architect, of which number ten have been commenced and four completed, and two of the largest Government buildings, those at Philadelphia and St. Louis, are practically completed.

The expenditures during the year for work on all new buildings, including sites, have amounted to $3,770,468.15; for repairs and preservation of public buildings, $168,476.76; for heating apparatus, and repairs to same, elevators, vaults, safes, locks, storage of silver dollars, &c., $144,930.76.

HALL OF RECORDS.

There is a necessity for the construction of a building at the Capital for the storage of the files and records of the several Departments. They have accumulated to such an extent, and room is so scant, that quantities must be stored in unsafe places so crowded as not to be easily accessible. The chances of loss of valuable and important papers and of mutilation and confusion are great.

The act approved August 7, 1882, directed the Supervising Architect of this Department to report to Congress, through the Secretary of the Treasury, first, a suitable plat of ground for such a building; and second, the probable cost, with plans and specifications. In obedience to this direction, plans and specifications for a suitable building were prepared by the Supervising Architect, which, with his report, were transmitted by me to Congress January 17, 1883. In my judgment, this is a matter which should have the attention of Congress at this session.

DISTRICT OF COLUMBIA.

The net expenditures on account of the District of Columbia, for the fiscal year 1883, were $3,817,028.48. The revenues deposited in the Treasury on this account for the same period were $1,970,938.47.

Since December 1, 1882, there has been retired, through the operation of the sinking-fund, $186,100 of the bonded indebtedness of the District, reducing the amount annually required for interest, $11,266.

Since the duties of the commissioners of the sinking-fund of the District of Columbia were devolved on the Treasurer of the United States by the act of Congress of June 11, 1878, there has been retired $1,375,350 of the funded debt, causing a reduction in the annual interest charge of $80,853.67.

IMMIGRATION.

The administration of the "act to regulate immigration," approved August 3, 1882, with the general supervision of which this Department is charged, has been attended with a reasonable measure of success.

There are certain restrictive features of the law which hinder the full accomplishment of its purpose. Some of these were noted in my last report, accompanied by recommendations of legislation for their removal. The experience of another year has confirmed the views then expressed.

The fund created by the act is derived from a tax on alien passengers, collected at the port at which they land from vessel. The expenditure of it for the main purposes of the act is limited to the ports at which collected. That expenditure is to be made by commissioners designated by State authority and bound by contract with the Secretary of the Treasury. As yet commissioners have been appointed only at the ports of New York, Philadelphia, Boston, Baltimore, Portland, Me., Key West, and Galveston; those for the four ports last named having been appointed since the date of my last report. At most of the other ports the sums collected are insufficient to warrant the appointment of commissioners. At a few ports the efforts of this Department to obtain commissioners have failed, through causes beyond its control. Hence, the tax collected at the ports where no commissions are established is covered into the Treasury, and there is no authority to apply it to the purposes of the act, either at the port where collected or at any others. At the same time the sum collected at ports where commissioners have been appointed, and moneys have been expended, is not enough for all that they could efficiently do. These results will be avoided, by giving the Secretary of the Treasury discretionary authority, to designate the collector or some officer of the customs supervisor of the local affairs of immigration at such ports, and to apply the moneys wherever collected when in surplus there, at places where more is needed than is there collected.

The provisions of the law which forbid the landing of alien convicts, lunatics, idiots, or persons unable to take care of themselves without becoming a public charge, cannot be properly enforced without penalties for their violation, which the law does not inflict. Some of the super-

vising boards or commissions have found it necessary to provide, temporarily, for the care of persons landed in violation of law. They have returned most of them to the respective countries whence they came. Were owners of vessels subjected to a penalty, to be a lien upon the vessel, in a sum large enough to defray the expense of care and deportation, it would go far to prevent these violations of the law. The penalties thus collected should create a special fund to defray the expense of care and deportation.

It occurs, that alien paupers, and others in indigent circumstances have arrived from Europe, whose passage-money and other expenses incident to the voyage, and but little more, were paid by the respective governments or municipalities from which they came, or by voluntary associations abroad. They are liable to become a public charge upon the communities in which they land, unless cared for awhile by the commissioners, and as soon as may be sent back where they belong. Such of these as were found incapable of self-support have, as far as practicable, been returned. Such practice by foreign authorities, whether of high or low degree, is discourteous, if not worse, and this Department has sought, through the State Department, to persuade to an abandonment of it; it is feared, without full measure of success. The number returned from the date of the immigration act (August 3, 1882) to the close of the month of September, 1883, was 1,952.

As the capitation tax is, under the law, collected only for aliens arriving by vessel, and as the disbursement of the fund is limited to the ports where collected, the inference is, that immigrants arriving at frontier ports from adjacent foreign territory by land-carriage are not within the operation of the act. No tax being collectible on account of them, there is no fund from which relief can be afforded them when in need; and the barriers provided by the law against objectionable immigration may not at such points be put up against them. The experience of this Department in the administration of the law leads it to believe, that immigration has to a certain extent been diverted from its ordinary and more natural routes, for the purpose of avoiding the exactions, and especially the prohibitions, of the law. While the boards of immigration have, in their inspections of passengers, derived assistance from the passenger-list required to be produced by the masters of vessels, the act does not apply in this respect to vessels from contiguous foreign territory. A passenger-list is produced, if at all, as matter of courtesy, and is often found to be inaccurate.

The first section of the immigrant act provides that the fund created by it shall, among other uses, be employed for the relief of such immi-

grants as are in distress. The second section has a provision substantially the same in effect, in that it requires that the State board or commission shall be bound by contract "to provide for the support and relief of such immigrants therein landing as may fall into distress or need public aid." The same section further provides, however, that if "there shall be found among such passengers * * * any person unable to take care of himself or herself without becoming a public charge, * * * such persons shall not be permitted to land." It would facilitate the administration of the law if some distinction, applicable in practice, could be made between these two classes, and some definite limit fixed within which immigrants under the care of the local boards shall continue a charge upon them, with a provision made for an earlier termination in special cases.

Amendatory clauses to the act will remedy these defects.

The act is defective, in that its execution depends entirely upon State officers. Naturally they care for local interests, and act to protect them. The execution of the law should be by Federal officers, under rules and regulations uniform throughout the country. The well-being of the immigrant and the protection of the whole public would be the end sought in all localities. At present there is lack of uniformity in the management and care of the immigrant, and the protection of the immediate public is first in contemplation.

The law makes no provision for sick and disabled immigrants, except at the port at which they may land. An immigrant arriving at New York, and ticketed to Albany, Buffalo, Chicago, or other interior city, reaching his destination sick and without means, falls upon the local authorities for care. They have no recourse upon the head-money collected at the port of arrival. The oversight and care of the Government should, for a time, be over the immigrant after he has left the place of landing, and reciprocal action and use of funds to that end should be had by the officers at various ports.

Protests have been made by consignees against the collection of the tax. They are reducible to these heads: Unconstitutionality of the tax because it is not equal; that it is in violation of treaty obligations; that it may not be collected for every alien child under eight years of age, and not at all for infants. Suits have been brought to recover the money paid. One has been tried before a Justice of the United States Supreme Court, and his judgment has been given for the validity of the law and the correctness of its execution.

The collections and disbursements of the immigrant fund from the date of the passage of the immigrant act (August 3, 1882) to the close

of the last fiscal year are as follows: Receipts, as shown by net deposits, $231,284.50; expenditures, $170,910.16. Of the receipts, $178,446.50 were collected at New York, and $162,288.71 were expended at that port. In addition to the expenditures from the immigrant fund made at New York by the commissioners of immigration, somewhat more than $50,000 was received by them from the State of New York and expended for like purposes. It will thus be seen that the receipts of head-money at New York have not alone been sufficient to defray the expenses incidental to the administration of the local affairs of immigration there. It is for Congress to consider whether, if the expenditures have been wisely made, there should not be a heavier capitation tax authorized.

STATISTICS OF IMMIGRATION.

Table showing the number of alien passengers arrived in the United States from 1830 *to* 1883, *and the number of immigrants arrived from* 1856 *to* 1883.

Period.	Alien passengers arrived.	Immigrants arrived.	Period.	Alien passengers arrived.	Immigrants arrived.
Year ended Sept. 30—			Year ended Dec. 31—		
1830	23,322		1851	379,466	
1831	22,633		1852	371,603	
1832	53,179		1853	368,645	
			1854	427,833	
Quarter ended Dec. 31—			1855	200,877	
1832	7,303		1856	200,036	195,857
			1857	250,882	246,945
Year ended Dec. 31—			1858	122,872	119,501
1833	58,640		1859	121,075	118,616
1834	65,365		1860	153,418	150,237
1835	45,374		1861	91,822	89,724
1836	76,242		1862	91,826	89,007
1837	79,340		1863	176,214	174,524
1838	38,914		1864	193,416	193,195
1839	68,069		1865	248,111	247,453
1840	84,066				
1841	80,289		Jan. 1 to June 30—		
1842	104,565		1866	167,737	166,112
			Year ended June 30—		
Jan. 1 to Sept. 30—			1867	303,044	298,907
1843	52,496		1868	298,068	282,189
			1869	363,074	352,768
Year ended Sept. 30—			1870	402,920	387,203
1844	78,615		1871	342,609	321,350
1845	114,371		1872	422,978	404,806
1846	154,416		1873	473,141	459,803
1847	234,968		1874	327,949	313,339
1848	226,527		1875	244,632	227,498
1849	297,024		1876	169,991	169,986
1850	310,004		1877	165,019	141,857
			1878	157,776	138,469
Quarter ended Dec. 31—			1879	197,954	177,826
1850	59,976		1880	484,196	457,257
			1881	695,163	669,431
			1882	816,272	788,992
			1883	645,221	603,322

Table showing the number of immigrants arrived at each of the principal ports of the United States from the several foreign countries during the year ended June 30, 1883, as compared with the number arrived during the preceding fiscal year.

Customs districts and countries.	1883.	1882.	Decrease.
CUSTOMS DISTRICTS.			
Baltimore	35,690	41,739	6,049
Boston	48,188	58,186	9,998
Detroit	17,166	20,494	3,328
Huron	45,393	71,424	26,031
Minnesota	1,182	1,164	*18
New Orleans	1,707	3,142	1,435
New York	406,697	502,171	95,474
Passamaquoddy	3,360	3,148	*212
Philadelphia	24,808	36,284	11,476
San Francisco	8,191	32,668	24,477
All other ports	10,940	18,572	7,632
Total	603,322	788,992	185,670
COUNTRIES.			
England and Wales	64,737	4,050	19,313
Ireland	81,486	76,432	*5,054
Scotland	11,859	18,937	7,078
Austria	10,923	13,619	2,696
Germany	194,786	250,630	55,844
Italy	31,784	32,077	293
Norway	23,398	29,101	5,703
Sweden	38,277	64,607	26,330
Dominion of Canada	70,241	98,295	* 28,054
All other countries	75,831	121,244	45,413
Total	603,322	788,992	185,670

*Increase.

A STATUTE OF LIMITATIONS ON CLAIMS.

The experience of this Department from year to year, strengthens the conviction, that there should be made by law a limitation upon the time wherein claims against the Government may be presented. Claims that, if ever existing, arose fifty years ago, are now pending before auditing officers. Statutes of limitations are not in the nature of a refusal to pay a just and admitted claim. If vindictive at all, it is a penalty upon sloth and negligence. The true nature of them is as a protection to the honest from a second demand where payment has once been made, or against an unjust demand where written evidence of its ill-desert has been destroyed by mischance or lost by accident, and oral evidence once accessible is no more to be found in the memory of the living. He who insists that he is a creditor of the Government should not be indulged in holding back a claim for payment until, by loss or misplacement of records and the death or change of officers, the Government is bereft of the means of testing the fairness and validity of the demand. It is true that the Government, by its auditing officers, is a tribunal for itself and of counsel for itself therein. Yet so ingenious are claimants, that *prima facie* many a demand is just, which full knowledge of the facts would show to be hollow. Besides that, even if the means of testing the validity of it exists, the official time and effort spent

and the clerical labor called for are a burden upon the public. Especial statutes of this kind are known to Congressional legislation, and one general in its application would be healthful. The doctrine of *res adjudicata* is often applied in this Department, and claims once heard and fairly and directly passed upon adversely are for that alone refused a hearing. Yet they come again on the change of the head of a Department or the chiefs of divisions. If a statute of limitation should be considered, it should emphasize this feature of the case and give the renewed sanction of Congress to the practice of the Department.

THE PACIFIC RAILROADS.

Difficulties and differences have arisen between this Department and the Pacific railroads, in the administration of the laws for the reimbursement of the United States, for moneys directly or indirectly paid by it for their use or benefit. Litigation has ensued, and the courts have adjudicated upon the issues made. The cases are: The United States *vs.* Union Pacific Railroad Company, 91 U. S. Reps., 91; Union Pacific Railway Company *vs.* The United States, 16 Ct. Claims Rep., 353. They will show the points of difference, and that the judgments were adverse to the claims made in behalf of the United States. See, also, the Sinking-Fund Cases, 99 U. S. Reps., 700; Union Pacific Railway Company *vs.* United States, 104 U. S., 662; Central Branch Union Pacific Railroad Company *vs.* United States, 16 Ct. Claims, 360; Pacific Railroad Cases, 16 Ct. Claims, 359. The report of the First Comptroller of the Treasury for this year, beginning at page 8, presents an elaborate statement of the existing relations of the Government and these corporations, and to that report I crave leave to refer. In the mean time it has become apparent, that the sinking-fund provided for by the act of May 7, 1878, will be inadequate to meet the objects of that statute. Moreover, moneys received by this Department to be added to that fund may not be invested to the satisfaction of all interested, and lying idle, they yield no income, to the harm of all concerned.

The Treasury holds bonds in trust as follows:

1. For the Pacific railroads sinking-funds—	
(*a*) Union Pacific Railroad Company	$650,100 00
(*b*) Central Pacific Railroad Company	1,379,800 00
2. Indian trust-fund	1,808,016 83½
3. Miscellaneous	690,000 00

It also holds cash for the Pacific railroads sinking-funds—

For the Union Pacific	$1,134,859 79
For the Central Pacific	863,118 95

These sums have not been invested, as the Department has lacked the consent of the railroad companies to the purchase of the securities proposed by it. Safe securities have been so high in market value that the companies were averse to the purchase. The whole subject of an advisable method by which the Government may finally and assuredly obtain payment of the debt it holds against the corporations needs the attention of Congress.

It is plain that there is a need of Congressional intervention, and of legislation to place the relations of the contracting parties in a condition to benefit them all. The United States Commissioner of Railroads, in his report for 1882, made accurate statements upon this subject, and suggestions of legislation which, in their general scope, commend themselves to the judgment of this Department, and, as this Department is informed, are acceptable to those corporations. It is understood by the Department that the commissioner will, in his report for this year, renew his recommendations, and he will submit a bill for the consideration of Congress, designed to remove differences and difficulties, to end litigation and official embarrassment, and to put the pecuniary relations of the parties on a basis satisfactory to all. A draught of the bill has been left at this Department. The general aim of it is, to liquidate the amount of the debt owing by the corporations, so as to know what sum, payable in a period, the length of which is to be fixed, will fully pay the United States both principal and interest; and to determine what annual payments will accomplish that end. The arrangement of the details will be intricate. It is not apprehended, however, but that there will be an agreement upon them when Congress shall act upon it, if it sees fit to act. This Department earnestly asks the attention of Congress to this important subject.

ALASKA.

I earnestly direct attention to Alaska, yet unorganized as a Territory, and the necessity for the establishment there of civil government. The civilization of the country is retarded, and the development of its resources is prevented by the absence of proper laws and officers charged with their enforcement. A collector of customs and his assistants are the only civil officers residing there, and their powers by law are no greater than those of officers of the customs at other ports. The authority of a justice of the peace or like magistrate can be lawfully exercised by no one, and to a great extent might makes right throughout Alaska. Simple conflicting claims to personal property, not to mention affairs of greater magnitude, must be settled on the spot by force

and arms, or carried, with the necessary evidence and witnesses, nearly one thousand miles to the nearest court within the United States having jurisdiction of such cases. The pioneers and missionaries who have established commerce and dropped the seeds of civilization there have done so without the aid of efficient governmental protection, and at risks so great as to deter all but the hardy from the undertaking. Personal safety and the rights of property should be secured to every person within the Territory. A bill to establish civil government was considered by Congress at its last session, but failed to pass. It is reccommended that it have attention at this session.

The importance and value of Alaska as a commercial adjunct and, under proper protection as a place of residence for settlers, is not fully recognized. The climate is healthful and not severe. It has extensive fisheries, timber lands, and mineral deposits, all of which may be readily developed, and will prove a source of profit.

The Treasury Department should be relieved of the administration of affairs in that Territory, except so far as they come within its legitimate functions.

The Alaska Commercial Company has during the past year duly performed the conditions of its lease. It has taken about seventy-five per cent. of the maximum number of seal-skins allowed, and has paid the tax thereon and the rent of the Islands, in accordance with the terms of the lease.

The several reports of the heads of offices and bureaus are herewith transmitted.

CHAS. J. FOLGER,
Secretary.

To the Honorable
The SPEAKER OF THE HOUSE OF REPRESENTATIVES.

TABLES ACCOMPANYING THE REPORT.

TABLE A.—*STATEMENT of the NET RECEIPTS (by warrants) during the fiscal year ended June 30, 1883.*

CUSTOMS.		
Quarter ended September 30, 1882	$64,908,875 71	
Quarter ended December 31, 1882	48,700,538 01	
Quarter ended March 31, 1883	52,711,024 34	
Quarter ended June 30, 1883	48,386,058 87	
		$214,706,496 93
SALES OF PUBLIC LANDS.		
Quarter ended September 30, 1882	1,185,622 07	
Quarter ended December 31, 1882	1,882,171 70	
Quarter ended March 31, 1883	2,292,108 10	
Quarter ended June 30, 1883	2,595,961 65	
		7,955,864 42
INTERNAL REVENUE.		
Quarter ended September 30, 1882	37,760,804 58	
Quarter ended December 31, 1882	36,984,523 84	
Quarter ended March 31, 1883	33,363,601 89	
Quarter ended June 30, 1883	36,611,438 67	
		144,720,368 98
TAX ON CIRCULATION, DEPOSITS, ETC., OF NATIONAL BANKS.		
Quarter ended September 30, 1882	4,492,426 39	
Quarter ended December 31, 1882	32,517 07	
Quarter ended March 31, 1883	4,577,901 29	
Quarter ended June 30, 1883	8,164 10	
		9,111,008 85
REPAYMENT OF INTEREST BY PACIFIC RAILROAD COMPANIES.		
Quarter ended September 30, 1882	65,774 62	
Quarter ended December 31, 1882	837,317 43	
Quarter ended March 31, 1883	312,547 51	
Quarter ended June 30, 1883	341,227 34	
		1,556,866 90
CUSTOMS FEES, FINES, PENALTIES, AND FORFEITURES.		
Quarter ended September 30, 1882	422,140 09	
Quarter ended December 31, 1882	367,618 30	
Quarter ended March 31, 1883	315,653 12	
Quarter ended June 30, 1883	330,824 83	
		1,436,236 34
FEES, CONSULAR, LETTERS PATENT, AND LAND.		
Quarter ended September 30, 1882	822,842 49	
Quarter ended December 31, 1882	700,595 82	
Quarter ended March 31, 1883	821,598 12	
Quarter ended June 30, 1883	977,325 21	
		3,322,361 64
PROCEEDS OF SALES OF GOVERNMENT PROPERTY.		
Quarter ended September 30, 1882	113,995 95	
Quarter ended December 31, 1882	69,137 20	
Quarter ended March 31, 1883	53,437 83	
Quarter ended June 30, 1883	48,483 95	
		285,055 02
PROFITS ON COINAGE.		
Quarter ended September 30, 1882	1,040,119 39	
Quarter ended December 31, 1882	699,957 85	
Quarter ended March 31, 1883	831,190 56	
Quarter ended June 30, 1883	1,888,937 37	
		4,460,205 17
REVENUES OF DISTRICT OF COLUMBIA.		
Quarter ended September 30, 1882	194,314 88	
Quarter ended December 31, 1882	1,289,805 10	
Quarter ended March 31, 1883	205,544 28	
Quarter ended June 30, 1883	281,274 21	
		1,970,938 47
MISCELLANEOUS.		
Quarter ended September 30, 1882	1,783,690 25	
Quarter ended December 31, 1882	2,356,397 70	
Quarter ended March 31, 1883	3,481,514 69	
Quarter ended June 30, 1883	1,050,576 59	
		8,762,179 23
Total ordinary receipts		398,287,581 95
Cash in Treasury June 30, 1882		247,349,258 62
Total		645,636,840 57

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TABLE B.—*STATEMENT of the NET DISBURSEMENTS (by warrants) during the fiscal year ended June 30, 1883.*

CIVIL.		
Congress	$5,978,259 83	
Executive	10,025,775 20	
Judiciary	4,366,899 53	
Government of Territories	266,739 08	
Subtreasuries	351,026 82	
Public land offices	835,487 38	
Inspection of steam vessels	265,788 88	
Mint and assay offices	233,309 04	
Total civil		$22,343,285 76
FOREIGN INTERCOURSE.		
Diplomatic salaries	343,241 20	
Consular salaries	508,463 02	
Contingencies of consulates	176,134 34	
Rescuing American seamen from shipwreck	3,325 34	
American and Spanish Claims Commission	4,801 20	
Contingent expenses of foreign missions	84,966 32	
Prisons for American convicts	14,743 77	
Relief and protection of American seamen	25,217 84	
Expenses under the neutrality act	9,623 57	
American and French Commission	130,093 90	
International Fishery Exhibition	50,000 00	
Expenses Court of Alabama Claims	152,996 05	
Publication of commercial and consular reports	20,000 00	
Payment of the Japanese indemnity fund	785,000 87	
Relief of claimants brig General Armstrong	48,615 12	
Expenses of commission to negotiate a treaty with Mexico	12,000 00	
Contingent and miscellaneous	49,963 70	
Total foreign intercourse		2,419,275 24
MISCELLANEOUS.		
Mint establishment	994,724 21	
Coast Survey	597,638 36	
Light-House establishment	2,224,432 30	
Revenue-Cutter Service	944,819 26	
Life-Saving Service	746,649 19	
Marine-Hospital Establishment	461,181 46	
Custom-houses, court-houses, post-offices, &c	3,427,331 31	
Furniture, fuel, &c., for public buildings	841,516 25	
Repairs and preservation of public buildings	439,856 33	
Collecting customs revenue	6,591,224 51	
Refunding excess of deposits	4,367,838 85	
Debenture and drawbacks under customs laws	2,257,755 56	
Compensation in lieu of moities	25,389 83	
Detection and prevention of frauds on customs revenue	76,600 95	
Expenses of regulating immigration	127,345 97	
Expenses of Tariff Commission	69,000 00	
Inspection of neat cattle shipped to foreign ports	52,240 77	
Assessing and collecting internal revenue	4,424,707 39	
Punishing violations of internal-revenue laws	62,105 10	
Internal-revenue stamps, paper, and dies	519,388 88	
Refunding duties erroneously or illegally collected	623,549 56	
Internal-revenue allowances and drawbacks	53,096 91	
Redemption of internal-revenue stamps	52,195 15	
Expenses national currency	144,586 70	
Suppressing counterfeiting and frauds	66,995 60	
Contingent expenses Independent Treasury	59,170 71	
Survey of public lands	208,646 65	
Five per cent. fund, &c., to States	119,342 46	
Postage	145,440 08	
Vaults, safes, and locks for public buildings	36,553 71	
Indemnity for swamp lands	107,342 39	
Propagation, &c., of food-fishes	337,884 49	
Geological survey of Territories	218,947 77	
Deposits by individuals for surveys of public lands	876,923 75	
National Board of Health	127,149 40	
Expenses of Ninth and Tenth Censuses	424,535 77	
Payment of judgments, Court of Claims	646,129 77	
Mail transportation, Pacific railroads	937,832 78	
Deficiency in postal revenues	74,503 18	
Department of Agriculture	295,428 58	
Patent Office	128,980 27	
Expenses of Bureau of Engraving and Printing	398,482 49	
Return of proceeds of captured and abandoned property	124,551 38	
Smithsonian Institution	84,058 15	
Completion of the Washington Monument	160,000 00	
Public buildings and grounds in Washington	539,547 07	
Annual repairs of the Capitol	60,897 44	
Improving and lighting Capitol grounds	93,037 69	
State, War, and Navy Departments building	297,750 08	
Columbian Institute for Deaf and Dumb	60,500 00	
Government Hospital for the Insane	291,214 68	
Freedman's Hospital	52,500 00	
Howard University	25,000 00	

TABLE B.—*STATEMENT of the NET DISBURSEMENTS (by warrants) during the fiscal year ended June 30, 1883*—Continued.

MISCELLANEOUS—Continued.		
Charitable institutions	$19,457 50	
National Museum	150,612 50	
Repayment for lands erroneously sold	52,998 19	
Depredations on public timber	68,651 84	
Furniture, &c., for State, War, and Navy building	65,000 00	
Support and treatment of transient paupers	15,000 00	
Coinage of the standard silver dollars	160,676 09	
Sinking fund, Pacific railroads	552,636 00	
Redemption of District of Columbia securities	15,866 91	
Refunding taxes, District of Columbia	3,503 87	
Water fund, District of Columbia	113,870 05	
Special-tax fund	16,458 06	
Washington redemption fund	691 13	
Charitable institutions	212,740 13	
Washington Aqueduct	18,645 83	
Expenses of the District of Columbia	3,585,642 52	
Miscellaneous	729,489 45	
Total miscellaneous		$43,915,461 21
INTERIOR DEPARTMENT.		
Indians	7,362,590 34	
Pensions	66,012,573 64	
Total Interior Department		73,375,163 98
MILITARY ESTABLISHMENT.		
Pay Department	12,659,814 60	
Commissary Department	2,062,922 17	
Quartermaster's Department	13,179,792 45	
Medical Department	377,647 82	
Ordnance Department	1,861,826 37	
Military Academy	144,332 46	
Improving rivers and harbors	13,630,381 27	
Contingencies	26,676 19	
Expenses of recruiting	100,646 45	
Signal Service	294,466 54	
Expenses of military convicts	93,085 37	
Publishing the official records of the rebellion	33,486 68	
Support of National Home for Disabled Volunteers	1,122,088 03	
Support of Soldiers' Home	162,928 48	
Construction of military posts, roads, &c	268,707 69	
Fortifications	174,312 72	
National cemeteries	211,156 55	
Fifty per cent. arrears of Army transportation	296,379 38	
Construction of military telegraphs	48,989 00	
Bounty to soldiers, act July 28, 1866	75,214 30	
Expenses of Arctic exploring expedition	53,000 00	
Bounty to volunteers	244,550 91	
Mississippi River Commission	165,000 00	
Reimbursing the State of Missouri	234,580 10	
Reimbursing the State of Oregon	70,268 08	
Claims for quartermasters' and commissary supplies	311,062 75	
Refunding to States expenses in raising volunteers	454,163 07	
Operating and care of canals	199,200 00	
Horses and other property lost in the service	105,061 60	
Purchase of the Arlington estate	125,000 00	
Miscellaneous	115,641 90	
Total military establishment		48,911,382 93
NAVAL ESTABLISHMENT.		
Pay and contingencies of the Navy	$7,389,963 10	
Marine Corps	890,838 22	
Naval Academy	188,070 20	
Navigation	196,569 20	
Ordnance	237,283 69	
Equipment and Recruiting	809,820 57	
Yards and Docks	915,460 95	
Medicine and Surgery	109,447 14	
Construction and Repair	1,729,324 82	
Provisions and Clothing	1,150,594 50	
Steam Engineering	1,407,603 38	
Navy pension fund	210,000 00	
Miscellaneous	48,461 40	
Total naval establishment		15,283,437 17
Interest on the public debt		59,160,131 25
Total net ordinary expenditures		265,408,137 54
Redemption of the public debt		34,141,265 96
Total expenditures		299,549,403 50
Cash in Treasury June 30, 1883		346,087,437 07
Total		645,636,840 57

TABLE C.—*STATEMENT of the ISSUE and REDEMPTION of LOANS and TREASURY NOTES (by warrants) for the fiscal year ended June 30, 1883.*

	Issues.	Redemptions.	Excess of issues.	Excess of redemptions.
Treasury notes of 1846, act of July 22, 1846		$100 00		$100 00
Bounty-land scrip, act of February 11, 1847		100 00		100 00
Loan of February, 1861, act of February 8, 1861		18,000 00		18,000 00
Oregon war debt, act of March 2, 1861		5,450 00		5,450 00
Seven-thirties of 1861, act of July 17, 1861		50 00		50 00
Loan of July and August, 1861, acts of July 17 and August 5, 1861		21,522,950 00		21,522,950 00
Old demand notes, acts of July 17 and August 5, 1861, and February 12, 1862		710 00		710 00
Five-twenties of 1862, act of February 25, 1862		10,400 00		10,400 00
Legal-tender notes, acts of February 25 and July 11, 1862, January 7 and March 3, 1863	$109,764,714 00	109,764,714 00		
Fractional currency, acts of July 17, 1862, March 3, 1863, and June 30, 1864		46,556 96		46,556 96
Coin certificates, act of March 3, 1863	86,710 000 00	9,368,480 00	$77,341,520 00	
One-year notes of 1863, act of March 3, 1863		1,400 00		1,400 00
Two-year notes of 1863, act of March 3, 1863		1,800 00		1,800 00
Compound interest notes, acts of March 3, 1863, and June 30, 1864		7,340 00		7,340 00
Loan of 1863, acts of March 3, 1863, and June 30, 1864		47,476,650 00		47,476,650 00
Ten-forties of 1864, act of March 3, 1864		133,550 00		133,550 00
Five-twenties of June, 1864, act of June 30, 1864		7,050 00		7,050 00
Seven-thirties of 1864 and 1865, acts of June 30, 1864, and March 3, 1865		1,800 00		1,800 00
Five-twenties of 1865, act of March 3, 1865		9,600 00		9,600 00
Consols of 1865, act of March 3, 1865		40,800 00		40,800 00
Consols of 1867, act of March 3, 1865		235,700 00		235,700 00
Consols of 1868, act of March 3, 1865		154,650 00		154,650 00
Funded loan of 1881, acts of July 14, 1870, January 20, 1871, and January 14, 1875		367,180,450 00		367,180,450 00
Funded loan of 1907, acts of July 14, 1870, January 20, 1871, and January 14, 1875	120,850 00	1,418,850 00		1,298,000 00
Certificates of deposit, act of June 8, 1872	20,055,000 00	20,000,000 00	55,000 00	
Silver certificates act of February 28, 1878	35,040,000 00	12,519,879 00	22,520,121 00	
Refunding certificates, act of February 26, 1879		109,150 00		109,150 00
Loan of 1882, act of July 12, 1882	304,252,000 00	47,650 00	304,204,350 00	
Total	555,942,564 00	500,083,829 96	404,120,991 00	438,262,256 96
Excess of redemptions				438,262,256 96
Excess of issues				404,120,991 00
Net excess of redemptions charged in receipts and expenditures				34,141,265 96

TABLE D.—*STATEMENT of the net RECEIPTS and DISBURSEMENTS (by warrants) for the quarter ended September 30, 1883.*

RECEIPTS.

Customs	$57,402,975 67
Sales of public lands	2,932,635 17
Internal revenue	29,662,078 60
Tax on circulation, deposits, &c., of national banks	1,557,800 88
Repayment of interest by Pacific Railroad Companies	250,962 24
Customs fees, fines, penalties, and forfeitures	298,696 78
Consular, letters patent, homestead, &c., fees	863,209 80
Proceeds of sales of government property	112,562 23
Profits on coinage, &c	950,229 46
Miscellaneous	1,935,766 20
Total net ordinary receipts	95,966,917 03
Balance in the Treasury June 30, 1883	346,087,437 07
Total	442,054,354 10

DISBURSEMENTS.

Customs	5,491,195 56
Internal revenue	1,204,876 51
Diplomatic service	423,043 36
Quarterly salaries	116,218 50
Treasury proper	6,247,299 09
Judiciary	812,639 62
Interior (civil)	2,229,362 59
Total civil and miscellaneous	16,524,635 83
Indians	2,623,390 54
Pensions	16,285,261 98
Military Establishment	13,512,204 33
Naval Establishment	4,199,299 69
Interest on public debt	14,797,297 96
	67,942,090 33
Redemption of the public debt	19,247,204 50
Balance in Treasury September 30, 1883	354,865,059 27
Total	442,054,354 10

STATEMENT of the PUBLIC DEBT, including ACCRUED INTEREST thereon, less cash in the Treasury on the 1st day of July of each year, from 1869 to 1883, compiled from the published monthly debt-statements of those dates.

Years.	Outstanding principal.	Accrued interest.	Cash in the Treasury.	Debt less cash in the Treasury.
July 1, 1869	*$2,597,722,983 37	$47,447,310 79	$156,167,813 58	$2,489,002,480 58
1870	*2,601,675,127 83	50,607,556 52	265,924,084 61	2,386,358,599 74
1871	2,353,211,332 32	45,036,766 23	106,217,263 65	2,292,030,834 90
1872	2,253,251,328 78	41,705,813 27	103,470,798 43	2,191,486,343 62
1873	2,234,482,993 20	42,356,652 82	129,020,932 45	2,147,818,713 57
1874	2,251,690,468 43	38,939,087 47	147,541,314 74	2,143,088,241 16
1875	2,232,284,531 95	38,647,556 19	142,243,361 82	2,128,688,726 32
1876	2,180,395,067 15	38,514,004 54	119,469,726 70	2,099,439,344 99
1877	2,205,301,392 10	40,882,791 89	186,025,960 73	2,060,158,223 26
1878	2,256,205,892 53	36,404,551 37	256,823,612 08	2,035,786,831 82
1879	2,349,567,482 04	30,792,351 34	353,152,577 01	2,027,207,256 37
1880	2,120,415,370 63	22,845,547 59	201,088,622 88	1,942,172,295 34
1881	2,069,013,509 58	20,948,657 75	249,363,415 35	1,840,598,811 98
1882	1,918,312,994 03	13,890,986 47	243,289,519 78	1,688,914,460 72
1883	1,884,171,728 07	12,309,382 33	345,389,902 92	1,551,091,207 48

*It will be noticed that there is a difference in the amounts represented by these two statements as the principal of the debt July 1, 1869, and July 1, 1870. This difference is explained thus: In the principal of the debt as shown by the monthly debt-statements of these dates, the bonds purchased for the sinking-fund and paid for from money in the Treasury, were included as a part of the outstanding debt and were also treated in the cash as a cash item, or asset, for the reason that at that time there was no authority or law for deducting them from the outstanding debt. Congress, by the sixth section of the act of July 14, 1870, directed that these bonds should be canceled and destroyed and deducted from the amount of each class of the outstanding debt to which they respectively belonged, and such deductions were accordingly made on the books of the department and in the table of the debt in the annual report.

PAPERS

ACCOMPANYING

THE REPORT OF SECRETARY OF THE TREASURY.

REPORT OF THE COMMISSIONER OF INTERNAL REVENUE.

TREASURY DEPARTMENT,
OFFICE OF INTERNAL REVENUE,
Washington, October 30, 1883.

SIR: I have the honor to submit the annual report of the Commissioner of Internal Revenue for the fiscal year ended the 30th of June, 1883.

I also include certain additional information relative to the work of the Bureau during the months of July, August, and September of the present year, so that you may have before you a clear view of the present condition of the public business intrusted to my charge.

In the appendix to the bound volume* of this report you will also find carefully prepared tabular statements as follows:

Table A, showing the receipts from each specific source of revenue, except adhesive stamps, and the amounts refunded in each collection district, State, and Territory of the United States, for the fiscal year ended June 30, 1883.

Table B, showing the number and value of internal-revenue stamps ordered monthly by the Commissioner and from the office of the Commissioner; the receipts from the sale of stamps and the commissions allowed thereon; also the number and value of stamps for special taxes, tobacco, cigars, cigarettes, snuff, distilled spirits, and fermented liquors, issued monthly to collectors during the fiscal year ended June 30, 1883.

Table C, showing the percentages of receipts from the several general sources of revenue in each state and Territory of the United States to the aggregate receipts from the same sources, by fiscal years, from July 1, 1863, to June 30, 1883.

Table D, showing the aggregate receipts from all sources in each collection district, State, and Territory of the United States, by fiscal years, from September 1, 1862, to June 30, 1883.

Table E, showing the receipts in the United States from each specific source of revenue, by fiscal years, from September 1, 1862, to June 30, 1883.

Table F, showing the ratio of receipts in the United States from specific sources of revenue to the aggregate receipts from all sources, by fiscal years, from July 1, 1863, to June 30, 1883.

Table G, showing the returns of distilled spirits, fermented liquors, manufactured tobacco, snuff, cigars, and cigarettes, under the several acts of legislation and by fiscal years, from September 1, 1862, to June 30, 1883.

Table H, showing the receipts from special taxes in each collection district, State, and Territory for the special-tax year ended April 30, 1883.

* The appendix here referred to is omitted from this volume for want of space, but it will be found in the bound volumes of the Commissioner's report.

Table I. Abstract of reports of district attorneys concerning suits and prosecutions under the internal-revenue laws during the fiscal year ended June 30, 1883.

Table K. Abstract of seizures of property for violation of internal-revenue laws during the fiscal year ended June 30, 1883.

CONSOLIDATION OF COLLECTION DISTRICTS.

The President, by an executive order dated June 25, 1883, directed the consolidation of certain of the collection districts. The order was subsequently modified on different dates. As modified it has been fully carried into effect, except that in the State of Wisconsin (as to which the final order of modification was not made until the 13th day of October, 1883) Collector Irving M. Bean, of the new first district, to be composed of the first and third districts, has not as yet been put in charge. So soon as his new bond is approved the consolidated district will be formally transferred to him, and the executive order will have been fully executed. A few weeks at most will suffice for this.

Before the order of June 25, 1883, was issued there were one hundred and twenty-six collectors and collection districts. When the work of consolidation is completed in the Wisconsin district there will be only eighty-three collectors and collection districts, a reduction of forty-three.

The estimated annual saving to the Government by the reduction is $125,000.

REDUCTION OF TAXATION.

The act of March 3, 1883, diminished the sources of internal revenue in several most important particulars. It abolished entirely all adhesive-stamps taxation, such as were imposed upon proprietary medicines, bank checks, friction matches, &c., the reduction taking effect July 1, 1883. The tax on bank deposits and capital ceased at the beginning of the present calendar year; and the taxation on tobacco, in all its forms, was decreased one-half on the 1st day of May last.

It is estimated that the aggregate amount of these reductions will not be less than $43,000,000 per annum, including $6,000,000 tax on the capital and deposits of national banks, paid directly to the Treasurer of the United States.

While this is so, it is also estimated that the increased revenue from distilled spirits for the current year will so augment receipts from that source as to make the aggregate receipts for this year at least $120,000,000, should there be no further change in the internal-revenue laws.

COMPARATIVE RECEIPTS FOR THE LAST TWO FISCAL YEARS.

The total receipts from all sources of internal-revenue taxation for the fiscal year ended June 30, 1883, were $144,553,344.86 as compared with $146,523,273.72 for the year 1882, and $135,229,912.30 for the year 1881.

The following statements will exhibit detailed information of the amount of internal revenue collected during the past year, and also for the first three months of the present fiscal year,* of the sources from

*Heretofore the report has been delayed so as to include statistics for the month of October in each year, but in view of section 196 of the Revised Statutes and your letter of the 10th ultimo, a different course is now pursued, and I include only the first three months of the current fiscal year.

whence the revenue is derived, of the States and districts in which the collections during the past year were made, the cost of collection, &c.

COMPARATIVE STATEMENT OF RECEIPTS FOR LAST TWO FISCAL YEARS.

The receipts from the several objects of taxation under the internal-revenue laws during the last two fiscal years are shown in the following table:

Objects of taxation.	Amount of tax paid during fiscal years—		Increase.	Decrease.
	1882.	1883.		
SPIRITS.				
Spirits distilled from fruit	$1,095,164 60	$1,127,950 25	$32,785 65	
Spirits distilled from grain and other materials	63,683,592 37	67,957,906 48	4,274,314 11	
Rectifiers (special tax)	184,483 07	189,800 12	5,316 45	
Retail liquor-dealers (special tax)	4,455,355 55	4,624,587 77	169,232 22	
Wholesale liquor-dealers (special tax)	439,018 86	455,915 51	16,896 65	
Manufacturers of stills (special tax)	1,410 03	1,160 43		$249 60
Stills or worms manufactured (special tax)	4,783 00	4,020 00		763 00
Stamps for distilled spirits intended for export	9,600 10	7,434 00		2,166 10
Interest on tax upon spirits		64	64	
Total	69,873,408 18	74,368,775 20	4,495,367 02	
TOBACCO.				
Cigars and cheroots	18,245,852 37	16,895,215 15		1,350,637 22
Cigarettes	972,570 10	929,974 73		42,595 37
Snuff	778,650 87	736,022 82		42,628 05
Tobacco, chewing and smoking	25,033,741 97	22,136,402 53		2,897,339 44
Stamps for tobacco, snuff, and cigars intended for export	6,554 40	876 00		5,678 40
Dealers in leaf-tobacco (special tax)	84,585 63	54,535 12		30,050 51
Dealers in manufactured tobacco (special tax)	2,094,536 21	1,233,812 93		860,723 28
Manufacturers of tobacco (special tax)	8,762 48	5,697 88		3,064 60
Manufacturers of cigars (special tax)	143,859 66	96,899 00		46,960 66
Peddlers of tobacco (special tax)	22,875 22	14,813 63		8,061 59
Total	47,391,988 91	42,104,249 79		5,287,739 12
FERMENTED LIQUORS.				
Ale, beer, lager-beer, and porter	15,680,678 54	16,426,050 11	745,371 57	
Brewers (special tax)	195,824 31	184,885 49		10,938 82
Dealers in malt liquors (special tax)	277,417 57	289,680 21	12,262 64	
Total	16,153,920 42	16,900,615 81	746,695 39	
BANKS AND BANKERS, NOT NATIONAL.				
Bank deposits	4,096,102 45	3,026,208 32		1,069,894 13
Bank capital	1,153,070 25	722,003 93		431,066 32
Bank circulation	4,285 77	782 35		3,503 42
Total	5,253,458 47	3,748,994 60		1,504,463 87
MISCELLANEOUS.				
Bank checks	2,318,455 14	1,946,272 10		372,183 04
Friction matches	3,272,258 00	2,920,545 20		351,712 80
Patent medicines, perfumery, cosmetics, &c	1,978,395 56	2,186,236 16	207,840 60	
Penalties	199,830 04	305,803 57	105,973 53	
Back taxes under repealed laws	81,559 00	71,852 43		9,706 57
Total	7,850,497 74	7,430,709 46		419,788 28
Aggregate receipts	146,524,273 72	144,553,344 86		1,969,928 86

WITHDRAWALS FOR CONSUMPTION DURING LAST TWO FISCAL YEARS.

The quantities of distilled spirits, fermented liquors, manufactured tobacco, snuff, cigars, and cigarettes on which tax was paid during the same periods are as follows:

Products taxed.	Fiscal years ended June 30—		Increase.
	1882.	1883.	
Number of gallons of spirits distilled from fruit	1,216,850	1,253,278	36,428
Number of gallons of spirits distilled from grain, molasses, and other materials	70,759,548	75,508,785	4,749,237
Number of cigars	3,040,975,395	3,227,888,992	186,913,597
Number of cigarettes	554,544,186	640,021,653	85,477,467
Number of pounds of snuff	4,866,568	5,284,372	417,804
Number of pounds of tobacco	156,458,033	165,077,186	8,619,153
Number of barrels of fermented liquors	16,952,085	17,757,892	805,807

RECEIPTS BY COLLECTION DISTRICTS DURING LAST FISCAL YEAR.

The following statement shows the amount of internal revenue collected and accounted for during the last fiscal year by each collector in the several collection districts:

Collection districts.	Names of collectors.	Aggregate collections.
First Alabama	Albion L. Morgan	$50,941 26
Second Alabama	James T. Rapier	55,397 50
Do	F. M. Shouse (acting)	2,335 09
Arizona	Thomas Cordis	8,663 95
Do	Silas W. Fisher	31,343 77
Arkansas	Henry M. Cooper	97,715 53
First California	Chancellor Hartson	3,675,320 34
Fourth California	Amos L. Frost	326,552 80
Colorado	James S. Wolf	216,100 47
First Connecticut	Joseph Selden	220,524 34
Second Connecticut	David F. Hollister	286,466 50
Dakota	John L. Pennington	86,874 58
Delaware	James McIntire	293,636 48
Florida	Dennis Eagan	243,545 33
Second Georgia	Walter H. Johnson	307,770 27
Third Georgia	Edward C. Wade	9,372 62
Do	Lewis M. Pleasant	78,518 14
Idaho	Ronello W. Berry	35,079 88
First Illinois	Joel D. Harvey	9,119,191 79
Second Illinois	Lucien B. Crooker	254,223 33
Third Illinois	Albert Woodcock	101,092 49
Fourth Illinois	Richard Rowett	772,861 95
Fifth Illinois	Howard Knowles	13,963,625 50
Seventh Illinois	John W. Hill	54,731 27
Eighth Illinois	Jonathan Merriam	1,116,936 93
Thirteenth Illinois	Jonathan C. Willis	150,629 73
Do	Charles W. Pavey	444,232 40
First Indiana	James C. Veatch	207,502 02
Fourth Indiana	Will Cumback	2,765,256 46
Sixth Indiana	Frederick Baggs	63,447 06
Do	Horace McKay	662,898 09
Seventh Indiana	Delos W. Minshall	1,338,356 80
Do	William W. Carter	297,751 79
Tenth Indiana	George Moon	160,635 46
Eleventh Indiana	John F. Wildman	60,376 34
Do	Thomas M. Kirkpatrick	30,495 23
Second Iowa	John W. Green	292,378 77
Third Iowa	James E. Simpson	299,913 67
Fourth Iowa	John Connell	147,513 93
Fifth Iowa	Lampson P. Sherman	3,322,913 70
Kansas	John C. Carpenter	239,762 97
Second Kentucky	William A. Stuart	227,096 47
Do	Samuel R. Crumbaugh	1,308,560 08
Fifth Kentucky	Lewis Buckner	7,550,781 73
Sixth Kentucky	John W. Finnell	3,835,345 17
Seventh Kentucky	Armsted M. Swope	1,973,863 32
Eighth Kentucky	William J. Landrum	301,889 19

Collection districts.	Names of collectors.	Aggregate collections.
Ninth Kentucky	John E. Blaine	$189,541 07
Louisiana	Morris Marks	510,469 31
Do	George Drury	228,197 15
Maine	Franklin J. Rollins	72,893 32
Third Maryland	Robert M. Proud	452,917 01
Do	C. Irving Ditty	2,632,527 97
Do	John H. Sellman	204,517 75
Fourth Maryland	Webster Bruce	139,190 01
Third Massachusetts	Charles W. Slack	1,508,116 79
Fifth Massachusetts	Charles C. Dame	861,060 58
Tenth Massachusetts	Edward R. Tinker	384,484 60
First Michigan	Luther S. Trowbridge	940,967 72
Do	James H. Stone	310,441 80
Third Michigan	Harvey B. Rowlson	244,970 27
Fourth Michigan	Sluman S. Bailey	25,990 59
Do	Charles W. Watkins	143,921 96
Sixth Michigan	Henry C. Ripley	216,159 35
First Minnesota	Albert C. Wedge	117,842 58
Second Minnesota	William Bickel	417,619 38
Mississippi	James Hill	60,479 64
First Missouri	Isaac H. Sturgeon	6,200,677 64
Second Missouri	Alonzo B. Carroll	60,286 65
Fourth Missouri	David A. Stewart	388,953 87
Fifth Missouri	Bryan H. Langston	131,482 26
Sixth Missouri	Philip Doppler	899,010 98
Montana	Thomas P. Fuller	75,542 81
Nebraska	Lorenzo Crounse	940,795 12
Do	George W. Post	379,722 12
Nevada	Frederick C. Lord	40,870 72
New Hampshire	Henry M. Putney	352,998 08
First New Jersey	William P. Tatem	275,723 41
Third New Jersey	Culver Barcalow	486,631 30
Fifth New Jersey	Robert B. Hathorn	4,662,103 97
New Mexico	Gustavus A. Smith	54,037 46
First New York	Rodney C. Ward	2,802,941 66
Second New York	Marshall B. Blake	3,024,441 53
Third New York	Max Weber	5,122,133 14
Do	Morris Friedsam	1,613,796 53
Eleventh New York	Moses D. Stivers	169,700 96
Twelfth New York	Jason M. Johnson	590,564 93
Fourteenth New York	Ralph P. Lathrop	103,070 76
Do	James W. Bentley	487,606 63
Fifteenth New York	Thomas Stevenson	215,076 01
Do	James S. Smart	121,756 03
Twenty-first New York	James C. P. Kincaid	39,393 01
Do	James Armstrong	285,924 01
Twenty-fourth New York	James Chiverton (acting)	35,628 60
Do	John N. Knapp	524,134 99
Twenty-sixth New York	Benjamin De Voe	409,330 71
Twenty-eighth New York	Henry S. Pierce	1,079,290 23
Thirtieth New York	Frederick Buell	1,342,391 27
Second North Carolina	Elihu A. White	65,319 36
Fourth North Carolina	Isaac J. Young	865,952 10
Fifth North Carolina	George B. Everitt	988,991 35
Sixth North Carolina	Thomas N. Cooper	456,864 10
First Ohio	William H. Taft	7,699,466 14
Do	Clark B. Montgomery	2,878,061 58
Third Ohio	Robert Williams, jr	1,555,836 26
Fourth Ohio	Robert P. Kennedy	181,759 25
Sixth Ohio	George P. Dunham	443,683 26
Seventh Ohio	Charles C. Walcutt	673,406 44
Tenth Ohio	Clark Waggoner	64,583 05
Do	John F. Kumber	618,321 68
Eleventh Ohio	Marcus Boggs	519,923 73
Fifteenth Ohio	Jewett Palmer	169,435 60
Eighteenth Ohio	Worthy S. Streator	899,510 83
Oregon	John C. Cartwright	101,450 73
First Pennsylvania	William J. Pollock	2,824,875 99
Eighth Pennsylvania	Joseph T. Valentine	675,254 77
Ninth Pennsylvania	Andrew J. Kauffman	1,340,739 84
Twelfth Pennsylvania	Edward H. Chase	417,151 81
Fourteenth Pennsylvania	Charles J. Bruner	252,387 47
Sixteenth Pennsylvania	Edward Scull	248,455 24
Nineteenth Pennsylvania	Charles M. Lynch	123,310 67
Twentieth Pennsylvania	James C. Brown	82,713 35
Twenty-second Pennsylvania	Frank P. Case	1,854,674 01
Twenty-third Pennsylvania	Samuel M. Jackson	884,116 08
Rhode Island	Elisha H. Rhodes	395,319 42
South Carolina	Ellery M. Brayton	117,092 80
Second Tennessee	James M. Melton	119,241 32
Fifth Tennessee	William M. Woodcock	122,897 03
Do	Archelaus M. Hughes	856,382 82
Eighth Tennessee	Robert F. Patterson	75,369 12

Collection districts.	Names of collectors.	Aggregate collections.
First Texas	William H. Sinclair	$77,010 90
Third Texas	Benjamin C. Ludlow	79,510 74
Fourth Texas	William Umbdenstock	107,128 97
Utah	Ovando J. Hollister	53,895 18
Vermont	John C. Stearns	46,062 27
Second Virginia	James D. Brady	768,141 62
Third Virginia	Otis H. Russell	1,699,837 83
Fourth Virginia	William L. Fernald	837,736 70
Do	John B. Raulston	272,002 67
Fifth Virginia	J. Henry Rives	1,297,237 79
Sixth Virginia	Beverly B. Botts	203,239 74
Washington	James R. Hayden	49,207 54
First West Virginia	Isaac H. Duval	335,407 57
Second West Virginia	Francis H. Pierpont	211,075 92
First Wisconsin	Irving M. Bean	2,535,264 81
Second Wisconsin	Henry Harnden	198,820 09
Third Wisconsin	Howard M. Kutchin	278,364 02
Sixth Wisconsin	Leonard Lottridge	190,050 19
Wyoming	Edgar P. Snow	17,434 54
Total from collectors		137,500,291 40
Cash receipts from sale of adhesive stamps		7,053,053 46
Aggregate receipts		144,553,344 86

RECEIPTS FOR FIRST THREE MONTHS OF PRESENT FISCAL YEAR.

The following table shows the receipts from the several objects of taxation for the first quarter of the fiscal years 1883 and 1884. A comparison of the receipts for the two periods is also given:

Objects of taxation.	Amount of tax paid during first three months of fiscal years—		Increase.	Decrease.
	1883.	1884.		
SPIRITS.				
Spirits distilled from fruit	$196,083 02	$202,617 58	$6,534 56	
Spirits distilled from grain and other materials	15,917,242 33	17,255,430 88	1,338,188 55	
Rectifiers (special tax)	12,562 55	6,989 57		$5,572 98
Retail liquor-dealers (special tax)	294,498 12	280,897 50		13,600 62
Wholesale liquor-dealers (special tax)	22,600 10	24,721 44	2,121 34	
Manufacturers of stills (special tax)	325 00	445 83	120 83	
Stills or worms manufactured (special tax)	1,340 00	880 00		460 00
Stamps for distilled spirits intended for export	396 70	1,274 60	878 90	
Total	16,445,046 82	17,773,257 40	1,328,210 58	
TOBACCO.				
Cigars and cheroots	5,150,446 39	2,740,236 71		2,410,209 68
Cigarettes	299,164 84	110,328 21		188,836 63
Snuff	211,936 11	111,008 31		100,927 80
Tobacco, chewing and smoking	6,877,027 36	3,402,406 43		3,475,520 93
Stamps for tobacco, snuff, and cigars intended for export	876 00			876 00
Dealers in leaf tobacco (special tax)	3,595 81	2,360 49		1,235 32
Dealers in manufactured tobacco (special tax	152,784 31	85,699 51		67,084 80
Manufacturers of tobacco (special tax)	279 20	194 00		85 20
Manufacturers of cigars (special tax)	5,111 16	3,833 72		1,277 44
Peddlers of tobacco, (special tax)	1,873 43	1,453 05		420 38
Total	12,703,994 61	6,457,520 43		6,246,474 18
FERMENTED LIQUORS.				
Ale, beer, lager-beer, and porter	4,925,918 03	5,216,548 38	290,630 35	
Brewers (special tax)	3,500 00	3,825 03	325 03	
Dealers in malt liquors (special tax)	35,883 49	34,232 17		1,651 32
Total	4,965,301 52	5,254,605 58	289,304 06	

Objects of taxation.	Amount of tax paid during first three months of fiscal years—		Increase.	Decrease.
	1883.	1884.		
BANKS AND BANKERS NOT NATIONAL.				
Bank deposits	$824,177 32	$447 54	.....	$823,729 78
Bank capital	232,409 80	810 07	.....	231,599 73
Bank circulation	18 27	213 23	$194 96	.....
Total	1,056,605 39	1,470 84	.....	1,055,134 55
MISCELLANEOUS.				
Bank checks, friction matches, patent medicines, &c. (repealed July 1, 1883)	2,355,857 15	52,530 32	.....	2,303,326 83
Other back taxes under repealed laws	4,379 83	63,213 44	58,833 61	.....
Penalties	66,394 88	68,580 50	2,185 62	.....
Total	2,426,631 86	184,324 26	.....	2,242,307 60
Aggregate receipts	37,597,580 20	29,671,178 51	.....	7,926,401 69

COST OF COLLECTION.

The cost of collection for the past fiscal year, distributed among the different items of appropriation, was approximately as follows:

For salaries and expenses of collectors, including pay of deputy collectors, clerks, &c	$1,974,000 00
For salaries and expenses of revenue agents, surveyors of distilleries, gaugers, storekeepers, and miscellaneous expenses	*2,288 667 12
For stamps, paper and dies	495 000 00
For expenses of detecting and punishing violations of internal-revenue laws	61,275 29
For salaries of officers, clerks, and employés in the office of Commissioner of Internal Revenue	294,792 47
Total	5,113,734 88

The total expenses (including the expenses of this office) will be found, on final adjustment, to be about 3½ per cent. on the amount collected.

GENERAL CONDITION OF THE SERVICE.

I am gratified to be able to state that the condition of the service is good. Indeed, in the main, it is excellent. In one or two localities there are some things to be corrected in the manner of administration, but these are not of very great moment, and it is thought all cause of complaint will soon disappear. I allude in this mainly to the fifth and sixth districts of North Carolina, where some abuses of long standing are, it is hoped, being gradually removed.

The thanks of the Commissioner are justly due to the officers of the internal revenue, generally, for their zeal and efficiency.

I should also express my high appreciation of the very valuable aid rendered this Bureau by many of the United States district attorneys and marshals throughout the country.

No extensive frauds are being perpetrated upon the Government by persons required to pay internal revenue taxes. While it is as impossible in this branch of the public service as in any other entirely to prevent violations and evasions of the law, still it is confidently believed

*This item is liable to be slightly increased by the payment of a few accounts not yet adjusted.

that these violations are neither very frequent nor very injurious to the revenue.

Evidence accumulates daily that even in those portions of the country where at one period it was not regarded as disreputable to resort to any device to defeat the collection of internal revenue, there is a healthy change of public sentiment, and it is not difficult to secure the conviction of the guilty.

I am well satisfied that no extensive organization exists, anywhere in the country, whose object is to defraud the Government of its internal revenue. While these general statements are true, it is equally true that not only have persons been guilty of misdemeanors, but they have not hesitated to commit the gravest crimes in resisting the internal revenue officers in their efforts to discharge their duties. A case in point was the murder of Deputy Collector Henry F. Walker, who was shot and killed by David Fraley in Stanley County, North Carolina, February 10, 1883, while attempting to seize a distillery illicitly operated. This office has used every exertion to aid the district attorney in prosecuting this case, and it is expected that when it comes to trial the result will be the conviction of the prisoner, Fraley, of willful murder.

STATUTE OF LIMITATIONS.

I respectfully suggest that Congress be requested to enact a statute fixing the limitation for the prosecution of offenses against the revenue laws at a much less period than five years, as now provided by law, except in cases where the accused places himself beyond the jurisdiction of the court of the district where the offense was committed. I am informed by judges of the United States district courts that in nearly every instance where a conviction has been secured the offense was committed within two years before the indictment was found. Cases older than two years are almost invariably lost by the Government. It is also very difficult in such cases to prevent abuses whereby the costs of prosecution are increased, and, ultimately, the ends of justice defeated. I am of the opinion that a shorter period of limitation would be much better in many ways and greatly lessen the expense of such prosecutions to the Government. Indeed, I have been strongly urged to recommend a proclamation of general amnesty to all persons who have retailed distilled spirits without the payment of a special tax, and to all persons who have operated small distilleries without registering the same, and complying with other laws and regulations. This view is urged by its advocates upon the ground that a large number of those thus engaged are desirous of abandoning their unlawful practices, but, having long been violators of the law, they see no special inducement to leave off if, at any time, they are to be arrested for what was done within five years.

These views are especially urged upon this office as applying to operations of small distillers in inaccessible mountain regions, in various States, where the quantity of spirits made is very small.

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MISCELLANEOUS EXPENSES.

The act of Congress approved August 7, 1882, making provision for sundry civil expenses for the year ending June 30, 1883, required the Commissioner of Internal Revenue to make a detailed statement of all miscellaneous expenditures in the Bureau of Internal Revenue, for which appropriation was made in that act. In accordance with the aforesaid

requirement, I submit the following detailed statement of miscellaneous expenses incurred:

Express on public money, &c	$6,789 50
Stationery for internal-revenue officers	16,326 63
Internal Revenue Record for internal-revenue officers	2,410 70
Telegraphing	1,114 10
Compensation of United States attorneys in internal-revenue cases, under sections 827 and 838, Revised Statutes	5,033 49
Locks for distilleries	3,080 58
Hydrometers for use in gauging spirits	7,630 80
Gauging-rods for standard-tests, gauging, &c	115 50
Alcohol for scientific tests, and expenses	254 20
Expense of seizure and sales by collectors	143 10
Traveling expenses of clerks under special orders of the Department	1,279 20
Rent of offices leased by the Secretary of the Treasury in New York City for the collector of the second district	5,000 00
Dies for canceling tobacco stamps	686 30
Federal Reporter and Postal Guide	11 30
Total	49,875 40

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OPERATIONS AGAINST ILLICIT DISTILLERS.

The following statement shows the number of illicit stills seized, persons arrested, and officers and employés killed during the last fiscal year:

Districts.	Number of stills seized.	Number of persons arrested.	Officers or employés killed.
First Alabama	4	14	
Second Alabama	13	85	
District of Arkansas	2	7	
First California	1		
District of Florida	2	2	
Second Georgia	124	874	
Third Georgia	12	2	
Fourth Illinois	2	2	
Thirteenth Illinois	4	4	
Second Kentucky	2		
Fifth Kentucky	4	1	
Eighth Kentucky	29	3	
Ninth Kentucky	8	9	
Tenth Massachusetts	1	1	
District of Mississippi	2	2	
Second Missouri	1	1	
Sixth Missouri	2	2	
Third New York	3	2	
Fourth North Carolina	12	10	1
Fifth North Carolina	28	4	
Sixth North Carolina	55		
Sixteenth Pennsylvania		1	
Twenty-second Pennsylvania	1		
District of South Carolina	49	45	
Second Tennessee	8	532	
Fifth Tennessee	12	7	
Eighth Tennessee	2		
Fourth Texas	1		
District of Utah	1		
District of Vermont		3	
Fourth Virginia	1	2	
Fifth Virginia	10	19	
First West Virginia		1	
Sixth Wisconsin	1		
Total	397	1,635	1

There has been generally throughout the country little disposition to evade the payment of internal-revenue taxes. On the contrary, there has been evinced by the great body of tax-payers a willing obedience to the laws. There has been no relaxation on the part of officers to secure the close and faithful collection of the taxes.

In portions of the country, notably in the more remote and sparsely-settled districts of the Southern States, within a few years, the production of and traffic in illicit spirits and tobacco have prevailed to a great extent. In some districts formidable combinations existed to resist the collection of taxes, and the authority of the Government was openly defied. The enforcement of the laws was attended with great difficulty, and not unfrequently with loss of life to the officers. The policy adopted to execute the laws firmly and vigorously, but impartially, and in as conciliatory a manner as possible, has brought about a better public sentiment, and a decided improvement in the condition of affairs in this respect in the localities referred to.

By reference to the reports of former years it will be seen that illicit distillation in the country has been greatly reduced within five years. The report of the last fiscal year encourages me to believe that by continuing the firm, energetic, and impartial enforcement of the laws which now prevails, with such leniency to offenders as circumstances may seem to justify, this great evil may be further reduced. It is too much to expect that it can ever be wholly eradicated.

Below will be found a statement of the number of stills seized and casualties to officers and employés engaged in the suppression of illicit distillation for the last five years:

	1878.	1879.	1880.	1881.	1882.
Stills seized	1,024	1,319	969	756	464
Officers and employés killed	8	7	3	1	4
Officers and employés wounded	17	19	7	9	1

The report for the last fiscal year, which is embraced in table on page 134, shows that 397 stills were seized, and that there was but one casualty to employés.

OFFERS IN COMPROMISE.

The following statement shows the number of offers received and accepted in compromise cases for the fiscal year ended June 30, 1883, with amount of tax, assessed penalty, and specific penalty accepted, as provided under section 3229, Revised Statutes:

Months.	Compromise offers.		Amount of tax.	Amount of assessed penalty.	Amount of specific penalty.	Total.
	Received.	Accepted.				
July	53	50	$4,211 21	$3 66	$4,788 85	$9,003 72
August	60	55	1,323 75	67 50	3,537 50	4,928 75
September	56	22	2,134 96	71 66	5,027 10	7,233 72
October	68	26	148 25	38 30	927 20	1,113 75
November	41	76	4,000 00		128 75	4,128 75
December	81	77	58,009 77	32 50	4,788 44	62,830 71
January	61	76	5,511 48	40 00	2,981 97	8,533 45
February	39	66	1,508 87	95 00	1,775 15	3,379 02
March	48	44	4,249 08	100 00	1,332 50	5,681 58
April	53	33	51,628 92	17 34	21,561 10	73,207 36
May	49	50	16,600 78	62 50	2,159 08	18,822 36
June	42	35	52,346 11		868 50	53,214 61
Total	651	610	201,673 18	528 46	49,876 14	252,077 78

Whole number of offers received	651
Whole number of offers accepted	610
Amount of tax accepted	$201,673 18
Amount of assessed penalty fixed by law	528 46
Amount of specific penalties in lieu of fines, forfeitures, and penalties	49,876 14
Total	252,077 78

ABSTRACT OF SEIZURES.

Seizures of property for violation of internal-revenue laws during the fiscal year ended June 30, 1883, were as follows:

41,909 gallons of distilled spirits, valued at	$26,706 12
60,653 pounds of tobacco, valued at	5,040 75
524,441 cigars, valued at	3,537 20
Miscellaneous property, valued at	86,113 98
Total	121,398 05

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LEGACY AND SUCCESSION TAXES.

There were assessed and collected as legacy and succession taxes for the fiscal year $22,918.83.

It is perhaps not unsafe to say that every dollar of it was collected upon information given by professional informers. The extra cost of this work was 10 per cent. of the amount collected paid to the informer, viz, $2,291.88, and $3,000 salary and expenses paid to a deputy collector specially appointed for the examination of these cases, making a total expenditure of $5,291.88, or about 23 per cent. of the amount collected.

The act of July 14, 1870, which went into operation on the 1st of October, 1870, repealed this class of taxation, and the work of making collections at this late date of claims arising under the old law involves much that is exasperating, inquisitorial, and odious. It is very difficult, after the lapse of so many years, to ascertain the exact facts in any case, and in view of the complete settlement long ago of many estates much injustice and hardship is often possible. In consideration of these facts and the certainty that only small sums, if anything, can be collected, I have directed that the allowance for the employment of a special deputy collector for this class of cases shall cease on the 31st day of December next, and I shall, with your approval, offer no further inducements to informers in such cases. Should any just claims remain outstanding I shall endeavor to have them collected through the ordinary channels.

ESTIMATED EXPENSES FOR NEXT FISCAL YEAR.

I estimate the expenses of the Internal Revenue Service for the fiscal year ending June 30, 1885, as follows:

For salaries and expenses of collectors	$1,850,000 00
For salaries and expenses of thirty-five revenue agents, for surveyors, for fees and expenses of gaugers, for salaries of storekeepers, and for miscellaneous expenses	2,300,000 00
For dies, paper, and stamps	475,000 00
For detecting and bringing to trial and punishment persons guilty of violating the internal-revenue laws, including payment for information and detection	75,000 00
For salaries of officers, clerks, and employés in the office of the Commissioner of Internal Revenue	299,190 00
Total	4,999,190 00

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REDEMPTION OF CHECK AND PROPRIETARY STAMPS AND CANCELLATION OF IMPRINTED CHECK-STAMPS.

The repeal of the stamp duty on checks and proprietary articles was necessarily followed by the presentation, under section 3426 Revised Statutes, and the act of March 1, 1879, which provided therefor, of a large quantity of stamps for redemption. Indeed the number was enormous.

The practice of using checks with stamps imprinted on them instead of adhesive check-stamps has been on the increase for several years. More than three-fourths of the check-stamps issued during the past three years having been thus imprinted. This practice resulted in a large accumulation of stamped checks and drafts throughout the country, nearly every bank having a supply of stamped drafts on hand for its own use and stamped checks for the use of its customers, and the checks, being lithographed, were more valuable than the stamps upon them. In order to save to the holders the value of this costly stationery, late Commissioner Raum issued Circular No. 259, under date of April 19, 1883, in which he promised, in cases where imprinted check-stamps were presented on or after July 1 and the claim for their redemption was found to be satisfactory, to cancel the stamps by imprinting across them the words "Stamp redeemed," and then to return the blank checks to their owners.

I am informed that Commissioner Raum expected the appropriation of $20,000 for the alteration of tobacco stamps, &c., could be used for this work.

In answer to a large nnmber of inquiries, and in order to facilitate the work of cancellation, Circular No. 265 was issued under date of June 1, 1883. In this circular the method of cancellation was described and provision was made for forwarding stamps for redemption at once.

It was intended to commence the work about June 5, but it was found that the $20,000 appropriation for altering stamps, &c., was so worded that it could not be used for the cancellation of check-stamps. After considering the matter for nearly ten days, it was decided that the appropriation for the destruction of United States securities and stamps, which was included in the appropriation for labor and expenses of engraving and printing, could be used. Work was commenced under this decision June 15, with a force of about sixty persons specially employed for the purpose. At my suggestion a committee was appointed by the Secretary of the Treasury to verify the count of stamps after cancellation, and to certify to its correctness. The committee's certificate will be used as a voucher in the settlement of the accounts of the Commissioner of Internal Revenue. The number of stamps canceled by this force from June 15 to October 29 was 10,363,122, value $207,262.44, the average being about 100,000 stamps for each working day.

From the start the work was beset with difficulties. In anticipation of a large demand, 15,000 blank claims had been provided; but the supply was exhausted in a few days, and, as the appropriation for printing for the Department for the year was also exhausted, it was nearly three weeks before a further supply could be procured.

During this time over 2,000 letters of inquiry and requests for blanks accumulated, which could not be answered satisfactorily until the blanks were received.

On receipt of a further supply of blanks these letters were assorted and answered; but as the extra force employed had had, with few exceptions, no previous experience in clerical duty, the work could not be done as rapidly and efficiently as was desirable.

The letters received concerning redemption averaged for a considera-

ble time 200 per day, the total number received from July 1 to date being nearly 13,000.

Early in July the receipts of stamps became so heavy and the drain on the appropriation was so great that it was decided to limit the time in which stamps would be received for cancellation to July 31. This decision was promulgated in Circular No. 267, issued July 10, and was communicated, as all previous steps in the work had been, to the Associated Press, and by them to the various papers throughout the country.

Immediately after the issuance of this circular the receipts of stamps increased until they amounted to an average of about three hundred packages per day. These packages varied in size from envelopes containing a score only of stamps, to boxes of several hundred pounds, the largest package received weighing 750 pounds and containing over 100,000 stamped checks.

It was necessary that each package received should be opened and a count and record made of the contents. As this was done by inexperienced hands and in haste, claims enclosed in packages were in many cases overlooked, and errors in names and in numbering packages were made. These errors have been a constant source of trouble and correspondence, and have caused delay in many cases in answering letters of inquiry.

It was also impossible to make a proper record of the packages as fast as received, and the record of packages received prior to August 1 was not entirely completed until August 15. The bulk of the stamps received was so great that the halls of the Treasury building had to be utilized for their storage and watchmen to be employed for their protection.

Delay was also occasioned by the fact that but two persons who had had previous experience were available for the work. Owing to the change in the tax on tobacco, snuff, cigars, cigarettes, and special taxes which rendered necessary the return of all such stamps in collectors' hands, and the consolidation of internal-revenue districts, which necessitated the closing of nearly all collectors' accounts, the regular force employed in the stamp division was already fully employed, and hence could not be drawn upon for help to any considerable extent. All matters connected with the examination of claims and correspondence concerning them had therefore to be conducted by these two persons, and the counting of the stamps prior to their cancellation had also to be supervised by them until such time as others connected with the extra force could be trained to take charge of some portions of the work.

Much trouble was also caused by defective claims. About one-half of the claims received were returned for correction, many of them several times. In other cases claimants were written to repeatedly before the evidence required to complete their claims could be obtained.

To recapitulate, delays were caused by—

1. Lack of any specific appropriation to cover the expenses of the work.
2. A much larger demand for blank claims than was anticipated.
3. The fact that no sufficient force of trained clerks was available and the work had to be done to a considerable extent by inexperienced persons.
4. Lack of space in which to store and handle the large number of packages received.
5. Carelessness on the part of claimants in the preparation of their claims.

In this connection it seems proper to state that most of the trouble with claims is caused by the necessity of ascertaining the date on

which stamps presented are purchased from the Government, as under the provision of section 17 of the act of March 1, 1879, no allowance can be made for stamps unless they are presented for redemption within three years after their purchase from the Government or a Government "stamp agent." This provision made the vexatious Form 81 absolutely necessary.

The number of packages received from June 10 to July 31, inclusive, was 4,618, containing about 12,770,869 stamps, value $255,417.38.

Of this number there now remains on hand 1,698, containing 2,407,748 stamps of the value of $48,154.96. As nearly as can be ascertained, about 1,000,000 of these stamps were presented for cancellation and return. The number of packages received from August 1 to date is about 1,800, supposed to contain about 5,000,000 stamps, value $100,000. These cases have been recorded and numbered, and the claims for their redemption filed, but no action has been taken on them. The amount required for redeeming all these stamps received to date will be about $350,000.

* * * * * * *

This office has felt the full force of the enormous pressure of the work of cancelling and redeeming stamps. Parties sending in stamps, in many instances, imagined that the redemption was a cash transaction, wherein the money was given over the counter in exchange for stamps. Appreciating its importance to business men, the work on stamped checks sent in for cancellation and return has been vigorously pushed forward, and the greater portion of such check stamps have been imprinted and returned to owners.

Work on check stamps forwarded for redemption and destruction has also been energetically pressed, and the claims are being rapidly passed and forwarded to the Fifth Auditor of the Treasury for settlement. A large number of persons apparently unaware of the conditions prescribed in Circular No. 267 (although the utmost pains were taken to disseminate this circular through the newspaper press), sent in stamped checks for cancellation and return, after July 31, 1883, and are now anxious that this circular shall be modified so as to admit of their checks being imprinted and returned. It is, perhaps, a hardship that such persons should lose either the stamps or the checks thus forwarded, but the demand upon the appropriation of the Bureau of Engraving and Printing to pay the cost of this work has been so great, and that appropriation has been so depleted by this unexpected drain, that it is difficult to do otherwise than rigidly adhere to the requirements laid down in Circular No. 267. When the Chief of the Bureau of Engraving and Printing saw the dilemma in which this office was placed by the number of claims made under Circular No. 259, issued by my predecessor, and when it was found that the appropriation of $20,000 above referred to was not available to pay for carrying out its promise, to relieve the great embarrassment of this Bureau which would result from abandoning the position taken in that circular, owing to the lack of funds to carry out its provisions, he consented to do the work, the First Comptroller being of the opinion that it could be done and lawfully paid for by him.

I desire to express the very grateful thanks of this office to the Chief of that Bureau for this aid, which, while it was a great favor to this Bureau, was also of special benefit to the public. It is sincerely hoped that Congress will not hesitate to supply any deficiency resulting from this action of the Bureau of Engraving and Printing by an additional appropriation.

MANUFACTURE OF PAPER.

During the fiscal year there was manufactured by the Fairchild Paper Company, of Boston, Mass., under contract entered into September 19, 1882, 423,436 pounds of paper for (printing) internal-revenue stamps. The rates paid were 10¾ cents per pound for vegetable-sized, and 11¾ cents per pound for animal-sized paper.

The contract with this company has been continued for the manufacture of such paper as may be required during the current fiscal year, and orders have been given to this date (October 23, 1883) for 332,938 pounds.

Animal-sized paper was used exclusively for check and proprietary stamps, and, owing to the repeal of the stamp duty on checks and proprietary articles, will be no longer required.

PRODUCTION OF STAMPS.

During the last fiscal year all internal-revenue stamps have been produced by the Bureau of Engraving and Printing, except stamps imprinted upon bank checks, which have been supplied by the Graphic Company of New York City, and stamps upon foil wrappers for tobacco, which have been printed by Jno. J. Crooke & Co., of New York.

The contract with the Graphic Company was closed June 15, by reason of the repeal of the tax on bank checks.

TOBACCO.

The collections from tobacco for the fiscal year ended June 30, 1883, were $42,104,249.79. In this amount are included taxes imposed upon imported manufactured tobacco, snuff, and cigars, in addition to customs duties, the taxes imposed on domestic manufactured tobacco, snuff, and cigars, the special taxes paid by manufacturers of tobacco, snuff, and cigars, the special taxes paid by dealers in leaf and dealers in manufactured tobacco, and it also includes the receipt of money for export stamps sold to exporters of tobacco.

The collections from the several sources above named for the last fiscal year are less than those of the fiscal year immediately preceding by the sum of $5,287,739.12.

* * * * * * *

REVIEW OF THE TOBACCO TAX.

The act of March 3, 1883, reduced the rates of tax on all manufactured tobacco, snuff, and cigars one-half, and on cigarettes weighing not more than three pounds per thousand, to two-sevenths of the previous rate. The same act reduced all special taxes imposed upon manufacturers of and dealers in tobacco under various forms fully 50 per cent. These rates became operative on and after May 1, 1883, so that nearly all the special taxes for the last fiscal year were collected at the reduced rates. During the last two months of the fiscal year, the taxes on tobacco, snuff, and cigars were collected at the reduced rates. All changes and prospective changes in the tax laws disturb the normal condition of trade. It is therefore impossible to tell, until a law has been in operation for a sufficient length of time to counteract the influence of changes which materially affect prices and stimulate or retard business operations, what will be its effect on the revenues.

Supposing the tobacco, snuff, cigars, and cigarettes had all been taxed at the present rates, the aggregate receipts would have been as follows:

170,361,558 pounds tobacco and snuff at 8 cents per pound	$13,628,924 64
3,227,888,992 cigars at $3 per thousand	9,683,666 97
119,150 cigarettes at $3 per thousand	357 45
639,902,503 cigarettes at 50 cents per thousand	319,951 25
Total receipts therefrom would have been	23,632,900 31
Actual receipts therefrom were	40,697,615 23
Difference would be	17,064,714 92

At the old rates the aggregate receipts on the same quantity of tobacco and snuff, and numbers of cigars and cigarettes, would have been $47,745,727.50, and the difference would have been $24,112,827.19 more than at the present rates of tax thereon.

The actual receipts from special taxes were $1,405,758.56. Had the old rates continued the same number of persons employed in the different kinds of business would have paid special taxes aggregating $2,525,999.73, or $1,120,241.17 more than were paid.

These figures show that the reduction of tax rates made by the act of March 3, 1883, will, on the basis of last year's business, cause a reduction of revenue from tobacco during the next fiscal year of at least twenty-five million dollars.

* * * * * * *

DIRECT TAX.

I desire to call attention to the subject of the direct tax; and with a view of making some suggestions regarding the balance uncollected, I have the honor to report somewhat in detail regarding it.

The subject, I know, is not a new one, but it was left, many years ago, in some portions of the country, in so unsettled and unfinished a condition that even at this remote period there are complications and complex questions arising in connection with it which this office is called upon to consider; and my attention is directed to the fact that many were called upon to pay the tax, and many adjacent and in close proximity to them were not and have not been called upon to pay the amount charged against them. The amount uncollected exceeds three millions of dollars, as will be seen from the subjoined statements which I herewith submit, showing the amount apportioned to each State, Territory, and the District of Columbia under the act of Congress approved August 5, 1861, also showing the amount paid and unpaid in each, the amount realized from sales of lands for non-payment of the direct taxes charged against them, under the act of Congress approved June 7, 1862, and from resales or sales of lands which were bid in by the tax-commissioners and the titles to which became vested in the United States.

State or Territory.	Quota.	15 per cent. deduction.	Amount due after deducting 15 per cent.	Total paid.	Amount unpaid.	Remarks.
Maine	$420,826 00	$63,123 90	$357,702 10	$357,702 10	.....	
New Hampshire	218,406 66⅔	32,761 00	185,645 66⅔	185,645 67	.....	
Vermont	211,068 00	31,660 20	179,407 80	179,407 80	.....	
Massachusetts	824,581 33⅓	123,687 20	700,894 13⅓	700,894 14	.....	
Rhode Island	116,963 66⅔	17,544 55	99,419 11⅔	99,419 11	.....	
Connecticut	308,214 00	46,232 10	261,981 90	261,981 90	.....	
New York	2,603,918 66⅔	390,587 80	2,213,330 86⅔	2,213,330 86	.....	
New Jersey	450,134 00	67,520 10	382,613 90	382,614 83*	.....	*93 cents excess.
Pennsylvania	1,946,719 33⅓	292,007 90	1,654,711 43⅓	1,654,711 43	.....	
Delaware	74,683 33⅓	.....	.....	70,332 83	$4,350 50	See act of Congress approved Feb. 21, 1868.

State or Territory.	Quota.	15 per cent. deduction.	Amount due after deducting 15 per cent.	Total paid.	Amount unpaid.	Remarks.
Maryland	$436,823 33⅓	$65,523 50	$371,299 83⅓	$371,299 83		
Ohio	1,567,089 33⅓	235,063 40	1,332,025 93⅓	1,332,025 93		
Kentucky	713,695 33⅓	107,054 30	606,641 03	606,641 03		
Indiana	904,875 33⅓	135,731 30	769,144 03⅓	769,144 03		
Illinois	1,146,551 33⅓	171,982 70	974,568 63⅓	974,568 63		
Missouri	761,127 33⅓	114,169 10	646,958 23⅓	646,958 23		See act of Congress approved July 17, 1862.
Kansas	71,743 33⅓			9,360 82	$62,382 51	
Michigan	501,763 33⅓	75,264 50	426,498 83⅓	426,498 83		
Wisconsin	519,688 66⅔	39,340 43	480,342 43⅔	272,657 08	207,685 36	
Iowa	452,088 00	67,813 20	384,274 80	384,274 80		
Minnesota	108,524 00	16,278 60	92,245 40	92,245 40		
Nebraska	19,312 00				19,312 00	See act of Congress approved July 1, 1862.
California	254,538 66⅔			247,445 41	7,093 26	
Oregon	35,140 66⅔				35,140 66⅔	
New Mexico	62,648 00				62,648 00	See act of Congress approved July 1, 1862.
Utah	26,982 00				26,982 00	
Washington Ter.	7,755 33⅓			4,268 16	3,487 17	
Nevada	4,592 66⅔			4,592 33	34	
Colorado	22,905 33⅓				22,905 33⅓	
Dakota	3,241 33⅓				3,241 33⅓	See act of Congress approved Feb. 25, 1863.
District of Columbia.	49,437 33⅓			49,437 33		See act of Congress approved July 1, 1864.
West Virginia	208,479 65	27,172 72	181,306 93	153,978 75		See act of Congress approved Feb. 25, 1867.
Total	15,054,517 31⅓	2,120,524 50	12,301,013 00	12,451,437 26	455,228 47⅓	

As there were special provisions of law governing the proceedings in the eleven late insurrectionary States, requiring different headings in a tabulated statement, I submit a separate table for those States:

State.	Quota.	Tax collected.	Tax uncollected.	Proceeds from sales for non-payment of taxes, including amounts bid in excess of taxes.	Purchase-money refunded.	Balance of proceeds from sales.
Virginia	$937,550 66⅔					
Deduct West Virginia	208,479 65					
Balance	729,071 01⅔	$442,571 64	$286,499 37	$113,855 57	$76,781 68	$37,073 89
North Carolina	576,194 66⅔	377,452 60	198,742 06			
South Carolina	363,570 66⅔	210,789 31	152,781 35	28,232 29		28,232 29
Georgia	584,367 33⅓	82,427 47	501,939 86			
Florida	77,522 66⅔	6,495 28	71,027 38	56,999 23	16,520 37	40,478 86
Alabama	529,313 33⅓		529,313 33⅓			
Mississippi	413,084 00⅔	69,584 55	343,500 12			
Louisiana	385,886 66⅔	314,500 83	71,385 83			
Texas	355,106 66⅔	180,841 50	174,265 16			
Tennessee	669,498 00	381,534 57	287,963 43	123,097 00	47,559 35	75,537 65
Arkansas	261,886 00	154,199 28	107,686 72	56,865 00	40,483 45	16,021 55
Total	4,945,501 68⅓	2,220,397 03	2,725,104 61⅓	379,049 09	181,704 85	197,344 24

Congress, by acts approved July 1, 1862, and February 25, 1863, provided that the amounts apportioned to the then Territories of Nebraska, New Mexico, and Dakota, should be deducted from appropriations made by Congress for specified expenses of said Territories, but through some

inadvertence those Territories were not credited with their respective quotas, except a part to Nebraska, amounting to $4,281.60.

The appropriations from which the quotas of Nebraska and New Mexico were to be deducted were not all used; sufficient portions thereof seem to have been unused to satisfy the amounts apportioned to each, but have been carried to the surplus fund, which necessitates legislation by Congress to make them available.

The appropriation from which the quota of Dakota was to have been deducted appears to have been used, without crediting that Territory with any part of its quota; so that the entire amount apportioned to the three Territories named continues charged to them.

The amount remaining unpaid, as represented upon the first table, is ..	$455,228 47
The amount remaining uncollected in the eleven late insurrectionary States is	2,725,104 61
Total balance uncollected in all the States and Territories	3,180,333 08

Under the provisions of the act of Congress approved June 7, 1862, and the several amendments thereto, the *lands* in the eleven late insurrectionary States were charged with the direct tax apportioned to each of said States, under the act of August 5, 1861, and tax-commissioners were appointed in each of those States to assess and to collect said tax.

The tax-commissioners sold lands for non-payment of direct taxes in the States of Virginia, South Carolina, Florida, Tennessee, and Arkansas, and they struck off quite a quantity of lands in each of those States, except Arkansas, for the United States. The surplus proceeds from sales, after deducting purchase-money refunded and the taxes, &c., chargeable, are as follows:

In Virginia	$37,082 24
In South Carolina, not including the second sales	24,754 43
In Florida	35,478 86
In Tennessee	79,605 75
In Arkansas	14,376 92
Total	191,298 20
The proceeds in South Carolina under headings of resales	288,880 74
Total surplus, including second sales in South Carolina	480,178 94

The sales in Virginia occurred only in the counties of Alexandria, Accomack, and Northampton.

The sales in South Carolina occurred only in the parishes of Saint Helena and Saint Luke, upon the Sea Islands.

The sales in Florida occurred only at Saint Augustine and Fernandina.

The sales in Tennessee occurred only at Memphis.

The sales in Arkansas occurred only at Little Rock.

The records indicate that the direct-tax commissioners made assessments in about one-half of the counties in the eleven late insurrectionary States, and that they made collections in each of those States except Alabama.

The tax-commissioners were engaged in making assessments and collections in those States until Congress, by an act approved July 28, 1866, authorized a suspension of further collections in the eleven States referred to until January 1, 1868, and by act of Congress approved July 23, 1868, the suspension was further continued until January 1, 1869, since which date collections have not been resumed, nor has Congress

taken any action further suspending the same. Congress did, however, provide, by an act approved March 26, 1867, section 3, "that the Secretary of the Treasury is hereby authorized and required to discontinue the employment of any officer or person employed under the acts for the collection of direct taxes in insurrectionary districts within the United States, whenever, in his judgment, their service is no longer needed; and he is hereby authorized to devolve upon any officer or officers of internal revenue in said districts any portion of the duties imposed by said acts, who shall perform such duties without additional compensation."

In regard to the other States which had not assumed the payment of the direct tax, Congress provided, by an act approved June 30, 1864, section 47, as follows: "That the officers who may be appointed under this act, except within those districts within any State or Territory which have been, or may be, otherwise especially provided for by law, shall be, and hereby are, authorized, in all cases where the payment of such tax shall not have been assumed by the State, to perform all the duties relating to or regarding the assessment and collection of any direct tax imposed or which may be imposed by law."

The services of the direct-tax commissioners and their employés in the eleven insurrectionary States were discontinued, and the duties necessary to be performed, such as taking charge of lands which had been acquired by the United States under the direct-tax laws, &c., have been devolved upon officers of internal revenue.

The act of August 5, 1861, provides for an *annual* direct tax of $20,000,000, and apportioned the same to the different States, Territories, and the District of Columbia, but subsequent legislation limited it to one levy.

This act, in section 53, provides that any State, Territory, or District may assume and pay its quota, in its own way, by and through its own officers; and that if any State, Territory, or the District of Columbia shall give notice, by the governor or other proper officer thereof, to the Secretary of the Treasury of the United States, on or before the second Tuesday of February next thereafter, of its intention to assume and pay, or to assess, collect, and pay into the Treasury of the United States, the direct tax imposed by this act, said State, Territory, or District shall be entitled to a deduction of fifteen per centum on such portion of its quota as shall have been actually paid into the Treasury of the United States on or before the last day of June in the year to which such payment relates, and of ten per centum on such part or parts of its quota as shall have been actually paid into the Treasury of the United States on or before the last day of September in the year to which such payment relates. The same section also provides that the amount apportioned to any State, Territory, or the District of Columbia may be paid in whole or in part by the release of such State, Territory, or District to the United States of "any liquidated and determined claim of such State, Territory, or District of equal amount against the United States," and that in such release the same abatement shall be allowed as would be allowed in case of payment of the direct tax in money.

A subsequent act, approved May 13, 1862, extends the provisions of section 53, above referred to, to war claims which may be presented on or before the 30th of July, 1862.

Section 52 of the act of August 5, 1861, provides for the collection of the direct tax, in case a State or Territory is in actual rebellion, &c., as soon as the authority of the United States therein is re-established.

Most of the States, and the District of Columbia, except the eleven

insurrectionary States, assumed and paid the amounts apportioned to them.

By an act approved June 7, 1862, Congress provided for the collection of the direct tax apportioned to the insurrectionary States by and through United States direct-tax commissioners.

Sections 1 and 2 of that act provide that the direct tax shall be charged against each and every parcel of land in those States (not exempt by the laws of the State or of the United States), and that said tax, together with a penalty of fifty per centum, shall become a lien thereon, without any other or further proceeding whatever.

There are sixteen "school-farms" in South Carolina still owned by the United States and rented from year to year by the collector of internal revenue. These school-farms are lands which were bid in by the tax-commissioners for the United States, and were excepted from the sales made under the act of June 8, 1872. Each school-farm contains about 160 acres.

The rentals from them all average less than five hundred dollars per annum.

These rentals are invested in United States bonds, and the interest thereof is used for the support of public schools under the provisions of an act of Congress approved March 3, 1873.

The amount which has accumulated as a school-fund under the several direct-tax acts, and which has been invested in United States bonds, the interest of which is for the benefit of public schools in the parishes of Saint Helena and Saint Luke, South Carolina, is about $56,515.35.

I would suggest that a recommendation be made to Congress to provide for the redemption of the "school-farms" in South Carolina, and for the sale of the same in case of failure to redeem.

Under the provisions of the acts of Congress approved June 7, 1862, as amended, and May 9, 1872, nearly one-half of the original purchase-money has already been returned to the purchasers, and this office is advised that suits are still pending in courts which involve the tax titles, and the result of which may necessitate the return of more of the purchase-money to the purchasers.

The tax commissioners established their offices in the different counties in each of the eleven States mentioned as far as practicable, fixed the amount of tax charged against each tract or lot of land, gave public notice of the same and of the time and place for receiving it. Many of the land owners came forward and paid the tax and penalty charged against their lands, and many did not; and the tax, penalty, &c., still continues charged against the lands on which they have not been paid.

When the tax commissioners discontinued their work, the assessment books and papers were turned over to this office, and are now on file in this Department.

In regard to the collection of the unpaid portion of the direct tax, I respectfully suggest that exacting a direct tax from one land owner and permitting the tax upon the land adjoining to remain unpaid, is not equitable. I would therefore respectfully recommend that measures be taken, as soon as practicable, to collect the balance of that tax, in compliance with existing provisions of law, unless Congress desires a further suspension or different methods than are already provided.

At the last session of Congress an appropriation was made to pay the amount for which lots and tracts of land were sold for direct taxes in excess of the tax penalty, interest, and costs charged against the same to the owners of said lots and tracts at the time they were so sold.

The appropriation was based upon an estimate made by this office to cover the sales made to private purchasers, where payments were actually made, and did not include the amounts at which the tax commissioners struck off lots and tracts of land for the United States, which aggregates $77,561.18, or a surplus in excess of the taxes of $60,572.42.

The amount appropriated was $190,000. The amount of claims presented under this act is $179,665.38, leaving a balance for claims not yet presented of $10,334.62.

The number of claims presented under the appropriation is 293; the number of claims pending for payment to direct-tax purchasers on account of eviction under act of May 9, 1872, is 16, aggregating $4,692.

The number of claims presented for payment of *interest* alleged to have been illegally collected (act of February 25, 1867), is 288, aggregating $16,069.72.

The number of claims coming under the appropriation of $190,000, disposed of forty-three, aggregating $40,895.41, of which nineteen have been disallowed, aggregating $29,214.50.

The number of letters received in this branch of the office, 299; the number of letters written in this branch of the office, 512.

REBATE CLAIMS.

The following statement shows the number and amount of claims presented for rebate of taxes on tobacco, snuff, cigars, and cigarettes, under the provisions of section 4 of the act of March 3, 1883, and the present condition of the claims:

Whole number of claims presented	46,859
Amount of rebate claimed	$3,725,913 97
Number of claims allowed and forwarded to Fifth Auditor	43,729
Number of claims rejected	56
Number returned for amendment	3,074
Total	46,859
Amount of claims allowed and forwarded to Fifth Auditor	$3,524,167 22
Amount of claims rejected	1,787 48
Amount returned for amendment	199,959 27
Total	3,725,913 97

	Amount.
Manufacturers' claims, 846	$137,576 94
Dealers' claims, 46,013	3,588,337 03
Total	3,725,913 97

The claims of manufacturers have all been allowed.

The claims rejected and claims returned for amendment are claims of dealers.

Number of dealers' claims allowed, 42,883. Amount of dealers' claims allowed $3,386,590.28.

* * * * * * *

DISTILLERIES REGISTERED AND OPERATED.

The following statement shows the number of distilleries registered and operated during the fiscal year ended June 30, 1883:

States and Territories.	Grain.		Molasses.		Fruit.		Total number registered.	Total number operated.
	Number registered.	Number operated.	Number registered.	Number operated.	Number registered.	Number operated.		
Alabama	3	3	.....	.....	120	120	123	123
Arkansas	15	12	.....	.....	37	37	52	49
California	4	4	.....	.....	239	239	243	243
Connecticut	3	1	.....	.....	80	80	83	81
Delaware	.....	.....	.....	.....	60	60	60	60
Florida	.....	.....	.....	.....	.....	.....	.....	.....
Georgia	79	74	.....	.....	320	320	399	394
Illinois	27	23	.....	.....	26	26	53	49
Indiana	17	13	.....	.....	53	53	70	66
Iowa	4	3	.....	.....	5	5	9	8
Kansas	1	.....	.....	.....	2	2	3	2
Kentucky	347	277	.....	.....	325	325	672	602
Louisiana	1	.....	.....	.....	4	4	5	4
Maryland	19	19	.....	.....	10	10	29	29
Massachusetts	2	2	6	6	13	13	21	21
Mississippi	.....	.....	.....	.....	7	7	7	7
Missouri	24	17	.....	.....	105	105	129	122
Nebraska	1	1	.....	.....	.....	.....	1	1
New Hampshire	.....	.....	1	1	.....	.....	1	1
New Jersey	1	1	.....	.....	98	98	99	99
New Mexico	.....	.....	.....	.....	5	5	5	5
New York	6	5	.....	.....	76	76	82	81
North Carolina	408	371	.....	.....	1,246	1,246	1,654	1,617
Ohio	39	37	.....	.....	36	36	75	73
Oregon	1	1	.....	.....	5	5	6	6
Pennsylvania	90	82	.....	.....	35	35	125	117
South Carolina	22	19	.....	.....	60	60	82	79
Tennessee	86	82	.....	.....	294	294	380	376
Texas	3	2	.....	.....	30	30	33	32
Vermont	.....	.....	.....	.....	5	5	5	5
Virginia	39	39	.....	.....	696	696	735	735
West Virginia	3	3	.....	.....	34	34	37	37
Wisconsin	5	5	.....	.....	.....	.....	5	5
Total	1,250	1,096	7	7	4,026	4,026	5,283	5,129

CAPACITY, ETC., OF GRAIN DISTILLERIES.

The following statement shows the number and capacity of grain distilleries in operation and of grain distilleries closed in twenty-four principal spirit-producing districts at the beginning of each month during the fiscal year ended June 30, 1883, and the four succeeding months of the present fiscal year:

Months.	Number of distilleries.		Capacity in use of distilleries operating.		Surveyed capacity of distilleries operating.		Surveyed capacity of distilleries closed.	
	Operating.	Closed.	Bushels.	Gallons.	Bushels.	Gallons.	Bushels.	Gallons.
July	78	257	41,918	162,683	76,090	307,366	70,099	270,596
August	61	283	35,017	139,754	67,395	256,640	75,103	297,316
September	66	281	51,748	206,402	83,907	335,663	69,018	252,465
October	64	285	47,235	183,297	79,552	328,295	67,775	249,094
November	80	268	58,321	233,461	99,140	388,480	64,728	232,544
December	118	240	64,845	267,112	102,674	395,978	45,649	185,967
January	162	208	66,650	261,859	106,721	377,473	50,322	182,679
February	212	175	70,277	274,082	115,633	459,789	59,808	216,642
March	219	198	69,124	269,330	116,337	442,160	47,374	161,960
April	249	154	73,531	287,528	124,181	486,713	39,918	130,323
May	244	105	68,685	266,205	115,261	450,702	24,609	87,799
June	193	174	55,002	214,049	104,334	409,397	37,275	140,014
July	124	254	31,122	122,810	78,616	312,702	76,217	246,124
August	98	284	36,829	140,909	84,252	330,465	65,112	239,616
September	103	285	54,645	219,401	88,855	345,119	58,418	207,964
October	111	280	55,307	220,315	91,379	369,226	56,182	221,036

The following statement shows the number and capacity of grain and molasses distilleries in operation at the beginning of each month during the fiscal year ended June 30, 1883, and the first four months of the present fiscal year:

Months.	Number of distilleries.		Capacity of grain distilleries.		Capacity of molasses distilleries.		Total spirit-producing capacity per day.
	Grain.	Molasses.	Grain.	Spirits.	Molasses.	Spirits.	
			Bushels.	*Gallons.*	*Gallons.*	*Gallons.*	*Gallons.*
July	288	5	48,225	188,980	8,302	7,045	196,025
August	198	7	40,625	162,319	10,288	8,788	171,107
September	198	7	57,755	227,973	10,426	8,861	236,834
October	208	7	54,688	217,830	9,649	8,201	226,031
November	248	7	60,367	239,490	9,647	8,201	247,691
December	356	7	66,946	263,328	9,366	7,962	271,290
January	485	7	70,915	274,041	7,143	6,072	280,113
February	578	7	73,830	285,049	5,689	4,835	289,884
March	686	7	76,350	292,233	5,687	4,835	297,068
April	764	7	78,994	302,490	6,770	5,755	308,245
May	762	7	80,087	305,961	5,982	5,285	311,246
June	630	6	66,494	253,208	4,667	3,992	257,201
July	535	7	43,174	166,143	5,480	4,659	170,802
August	398	7	40,727	158,502	6,287	5,345	163,847
September	387	7	56,859	224,107	8,721	6,818	230,925
October	405	7	57,420	223,965	7,029	5,976	229,941

* * * * * * *

NOTE.—Many tabular statements, omitted for want of space, may be found in the bound volume of the Commissioner's report.

The total number of grain distilleries registered and operated shows an increase from 1,147 registered, and 934 operated, in the fiscal year ended June 30, 1882, to 1,250 registered, and 1,096 operated, in the last fiscal year.

This increase in number occurs mainly in the class of distilleries having the smaller capacities for the production of spirits. In the class of distilleries having the larger capacities, a very considerable decrease occurs in the number operated.

During the fiscal year ended June 30, 1882, 878 of the smaller distilleries were registered, but of this number only 672, or 76 per cent., were operated; while of the larger distilleries 269 were registered, and 262, or 97 per cent., were operated.

During the last fiscal year 969 distilleries of the smaller class, having a daily capacity varying from not exceeding 5 bushels of grain to not exceeding 60 bushels, were registered, and of this number 875, or 90 per cent., were operated.

Of the class of larger distilleries varying in daily capacity from 60 bushels of grain to 500 bushels and above (extending even to nearly 6,000 bushels per diem), 281 were registered, but only 221, or 78 per cent., were operated.

* * * * * * *

The quantity of grain used in the production of spirits during the past fiscal year, 18,644,787 bushels, is less than that used in the last preceding fiscal year (27,459,095 bushels) by 8,814,308 bushels; and is 6,705,567 bushels less than the average (25,350,354 bushels) for the last four years.

This decrease in the use of grain corresponds very closely with, and explains the decrease in the number of gallons of spirits produced from grain during the year, which is 72,235,175 gallons as against 104,149,077 gallons for the year ended June 30, 1882.

The yield of spirits from each bushel of grain increases slightly each year, being 3.874 gallons as against 3.792 for the year preceding, and 3.694 for the year 1881. This increase is believed to be due mainly to improved methods of preparing the grain for distillation.

The quantity of molasses used for the production of rum during the fiscal year is 2,373,106 gallons, an increase of 251,302 gallons over the quantity used in the preceding year (2,121,804 gallons), and a decrease of 205,745 gallons from the average quantity (2,578,851 gallons) used during the last four years.

* * * * * * *

USE OF ALCOHOLIC VAPOR IN THE MANUFACTURE OF VINEGAR.

It seems to me that further legislation should be had relative to the concession made to manufacturers of vinegar by the act of March 1, 1879, which permits this class of manufacturers to separate the alcoholic property from fermented mash, wort, or wash, and to use the same in the production of vinegar.

This privilege is one which presents to unscrupulous persons a constant temptation, together with sufficient opportunity, to engage in the illicit production of spirits; while its abuse is exceedingly difficult to prevent or to detect, owing to the want of proper safeguards.

As the law stands, the anomaly is presented of one class of manufacturers, using alcohol in their business, who are allowed to make their own alcohol without supervision or control, while the distillers who produce alcohol for use in all other trades and kinds of manufacture, are watched with constant care and subjected to rigid restrictions.

In my opinion, safeguards to the revenue which experience has demonstrated to be indispensable in the one case cannot be omitted with safety in the other.

I would urgently recommend that this privilege be withdrawn. Such manufacturers have for several years obtained all the alcohol used in their business free of the tax of 90 cents a gallon, and I do not assert that it would be wise to change the law to the extent of denying them that privilege. But practical experience has very clearly shown the proportion of alcohol needed in the wash from which the vinegar is generated. I am informed that no wash over 20 proof can be usefully employed, and that if it is over that strength it will not acetify when passed through the generator. Indeed practical operators assert that a wash over fifteen per cent. proof is not available. However that may be, it is generally agreed that a wash above twenty per cent. proof cannot be utilized. This being so, if the law should be so changed as to allow a drawback to vinegar-makers for the tax paid on the alcohol used by them in making vinegar, the opportunities for fraud would be reduced to the minimum.

If the Commissioner of Internal Revenue were given the power to prescribe regulations under which the amount of alcohol purchased and used by the manufacturer and the quantity of vinegar produced could be reported under oath to him, the correctness of the claims for drawback could be easily verified. Such a course would possibly be better for the manufacturer himself, as it would relieve him from the outlay at present required for distillery apparatus. Certainly it would be better for all who may hereafter embark in the business, and those who have already purchased their machinery could dispose of it, or it might be so arranged that they could make their distilled spirits and immediately withdraw them free of tax for manufacturing purposes. This would prevent a waste of material to the honest manufacturer, and, if done under the

supervision of an internal-revenue officer, would prevent frauds. If, however, the privileges now granted vinegar-manufacturers by the vaporizing process should not be withdrawn, it seems to me manifest that provision should be made for the application to the manufacture of vinegar by the vaporizing process of so much of the restrictions and of the supervision now in force respecting the distillation of spirits as may be necessary for the protection of the revenue from fraud. The presence of a Government storekeeper at these factories, if they are continued, I deem to be of especial importance, the compensation of the officer to be reimbursed to the Government by the manufacturer. At all events, experience has demonstrated that improved legislation upon the subject is imperatively demanded.

* * * * * * *

DECREASED PRODUCTION OF SPIRITS.

The quantity of spirits (74,013,308 gallons) produced and deposited in distillery warehouses during the fiscal year ended June 30, 1883, is less than the production (105,853,161 gallons) of the year 1882 by 31,839,853 gallons or less than the production of 1881 by 43,714,842 gallons.

The decrease in production of the fiscal year 1883 as compared with that of the fiscal year 1882 is distributed among the different kinds known to the trade, as follows:

		Gallons.
Decrease in production of—		
Bourbon whisky		20,913,422
Rye whisky		4,440,123
Alcohol		4,482,965
Gin		23,386
High wines		2,260,428
Miscellaneous		241,385
Total decrease		32,361,689
Increase in production of—		
Rum	97,876	
Pure, neutral, or cologne spirits	423,960	
Total		521,836
Net decrease		31,839,853

* * * * * * *

SPIRITS WITHDRAWN FROM WAREHOUSES FOR SCIENTIFIC PURPOSES AND FOR THE USE OF THE UNITED STATES.

The quantity of alcohol withdrawn free of tax from distillery warehouses for the use of colleges and other institutions of learning in the preservation of specimens of natural history in their several museums, and for use in their chemical laboratories, and of spirits of various kinds for the use of the United States, amounted during the year to 28,725 gallons, or 14,677 gallons more than the quantity withdrawn during the previous year.

TRANSFERS OF SPIRITS FROM DISTILLERY WAREHOUSES TO MANUFACTURING WAREHOUSES.

The quantity of spirits transferred to manufacturing warehouses during the year was 203,938 gallons, or 9,384 gallons less than the quantity withdrawn for transfer to such warehouses during the fiscal year 1882.

The falling off occurred as to alcohol and pure spirits. It is noted that bourbon and rye whiskies were transferred during the past year, no such spirits having been so transferred during the previous year.

* * * * * * *

DISTILLED SPIRITS ALLOWED FOR LOSS BY LEAKAGE OR EVAPORATION IN WAREHOUSES.

The quantity of spirits, 2,291,013 gallons, reported in the preceding table as lost by leakage or evaporation in warehouse, is that portion of the actual leakage in warehouse from packages withdrawn during the year, which has been allowed in accordance with the provisions of section 17 of the act of May 28, 1880.

The leakage allowed during June, 1880, was 75,834 gallons; the quantity allowed during the year ended June 30, 1881, was 811,466 gallons; that allowed during the year ended June 30, 1882, was 1,231,336 gallons, making the total allowance to July 1, 1883, 4,409,649 gallons.

The entire quantity of spirits withdrawn from distillery warehouses during the years 1881 and 1882 was as per original gauge 164,617,511 gallons.

The quantity allowed on account of leakage and evaporation in warehouse on this quantity was 2,042,802, or one and a quarter per cent. thereof nearly.

The entire quantity of spirits so withdrawn during the year 1883 was 83,291,190 gallons, and the quantity allowed for leakage in warehouse thereon was 2,291,013 gallons, as above stated, or two and seven-tenths per cent. thereof. This great increase in the percentage of leakage in warehouse may be due in part to frauds perpetrated by transferring small quantities of spirits from full packages to packages from which spirits have leaked in excess of the legal allowance. Such frauds have been discovered during the past year, and the guilty parties punished. But the great bulk of the increase is evidently due to the large increase in the withdrawals of old whisky.

Of this class are bourbon and rye whisky, the quantity of which withdrawn during the year 1883 was 21,896,135 gallons, or only 4,939,888 gallons less than the aggregate quantity withdrawn during the years 1881 and 1882.

It also appears upon comparison of tables furnished in this report with those given in the reports for the fiscal years 1881 and 1882 that while the quantity of spirits withdrawn during those years which were from two to three years old July 1, 1881, and July 1, 1882, respectively, was 4,342,763 gallons, the quantity of such spirits withdrawn during the year ended June 30, 1883, was 8,299,991 gallons.

DISTILLED SPIRITS LOST BY CASUALTY DURING THE YEAR.

The quantity of spirits, 184,770 gallons, reported in the preceding table as lost by casualty in distillery warehouses during the year ended June 30, 1883, is 72,246 gallons less than the quantity so lost during the next preceding year, or one gallon out of every eight hundred and eighty-seven gallons held on deposit in such warehouses during the year.

It also appears that the greater part, 170,357 gallons out of 184,770 gallons, was lost through one casualty by fire, which occurred at a warehouse in the twenty-second district of Pennsylvania.

* * * * * * *

DECREASE OF SPIRITS IN WAREHOUSE.

Nearly seven-tenths of the spirits remaining in warehouse June 30, 1883 (55,841,741 gallons out of 80,499,993 gallons), was bourbon whisky. There was a decrease in the quantity in warehouse June 30, 1883, as compared with the quantity in warehouse June 30, 1882, of 9,462,652 gallons distributed among all kinds known to the trade except pure, neutral, or cologne spirits, as follows:

	Gallons.
Decrease in bourbon whisky	7,168,479
Decrease in rye whisky	1,459,501
Decrease in alcohol	214,970
Decrease in rum	5,869
Decrease in gin	16,392
Decrease in high wines	108,313
Decrease in miscellaneous	678,564
	9,652,088
Less increase in pure spirits	189,436
Net decrease	9,462,652

* * * * * * *

The quantity of spirits, 80,499,993 gallons, actually remaining in warehouse June 30, 1883, is the quantity as shown by the original gauge of each package.

The quantity of spirits withdrawn from distillery warehouses for exportation during the year was 5,326,427 gallons.

* * * * * * *

SPIRITS REMAINING IN WAREHOUSES AT THE CLOSE OF THE YEAR.

The following table shows the quantity remaining in distillery warehouses at the close of each of the fifteen fiscal years during which spirits have been stored in such warehouses:

	Gallons.
Quantity remaining June 30, 1869	16,685,166
Quantity remaining June 30, 1870	11,671,886
Quantity remaining June 30, 1871	6,744,360
Quantity remaining June 30, 1872	10,103,392
Quantity remaining June 30, 1873	14,650,148
Quantity remaining June 30, 1874	15,575,224
Quantity remaining June 30, 1875	13,179,596
Quantity remaining June 30, 1876	12,595,850
Quantity remaining June 30, 1877	13,091,773
Quantity remaining June 30, 1878	14,088,773
Quantity remaining June 30, 1879	19,212,470
Quantity remaining June 30, 1880	31,363,869
Quantity remaining June 30, 1881	64,648,111
Quantity remaining June 30, 1882	89,962,645
Quantity remaining June 30, 1883	80,499,993

* * * * * * *

SPIRITS IN DISTILLERY WAREHOUSES NOVEMBER 1, 1881, NOVEMBER 1, 1882, AND OCTOBER 1, 1883.

Following is a statement of the quantities of spirits remaining in distillery warehouses November 1, 1881, November 1, 1882, and October 1, 1883:

States.	Gallons.		
	1881.	1882.	1883.
Alabama	5,942	1,240	3,134
Arkansas	14,253	8,134	20,326
California	222,382	332,918	260,148
Colorado	2,388		
Connecticut	25,956	15,394	6,866
Georgia	22,076	12,020	62,254
Idaho	5,508	6,894	
Illinois	1,905,620	2,194,383	1,174,012
Indiana	1,879,907	1,664,021	1,235,690
Iowa	4,756	24,475	19,038
Kansas	28,319	34,067	21,698
Kentucky	44,644,660	59,600,469	52,219,174
Maryland	3,723,706	4,021,007	3,349,798
Massachusetts	446,254	471,317	493,205
Montana			131
Missouri	206,612	162,457	195,316
Nebraska	198,284	195,203	164,322
New Hampshire	29,712	31,490	32,407
New Jersey	187,654	191,978	142,126
New York	281,025	345,066	242,470
North Carolina	137,183	88,409	154,151
Ohio	3,247,868	3,088,969	2,758,831
Oregon			2,022
Pennsylvania	7,683,851	9,464,256	8,056,339
South Carolina	5,677	2,587	12,382
Tennessee	1,438,385	1,362,493	1,527,574
Texas	8,493	6,434	6,340
Virginia	179,107	191,039	224,130
West Virginia	854,913	981,881	857,495
Wisconsin	51,095	129,730	163,852
Total	67,442,186	84,628,331	73,405,361

DISTILLED SPIRITS IN THE UNITED STATES OCTOBER 1, 1883.

The quantity of distilled spirits in the United States, except what may be in customs bonded warehouses, on the first day of October, 1883, was nearly one hundred and sixteen million gallons, this quantity being distributed as follows:

	Gallons.
In distillery and special bonded warehouses	73,847,103
In hands of wholesale liquor dealers	13,921,482
In hands of retail liquor dealers	28,180,650
Total	115,949,235

In making the above computation the average stock of each retail liquor dealer in the United States is estimated at one hundred and fifty gallons.

* * * * * * *

Of the 223,977 gallons grape brandy bonded during the last fiscal year 117,778 gallons were produced in the first district and 106,199 gallons were produced in the fourth district of California.

The total product was 157,848 gallons less than in the previous year, while the amount removed tax-paid was 27,429 gallons larger than in 1882. The loss resulting from regauge under the act of May 28, 1880, was 3,773 gallons more than in the previous year.

* * * * * * *

EXPORTATION OF MANUFACTURED TOBACCO AND SNUFF IN BOND.

The subjoined table shows as removed and unaccounted for July 1, 1882, and July 1, 1883, the quantity, in pounds, of manufactured tobacco and snuff which had been removed for exportation in bond, and concerning which the proof of exportation required by law had not been furnished prior to the dates named:

1. Removed and unaccounted for July 1, 1882:	Pounds.	Pounds.
Bonds in the hands of the U. S. district attorneys	17,094	
Tobacco at 24 cents removed under exportation bonds	3,481	
Tobacco at 24 cents removed under transportation bonds	9,835	
Tobacco at 16 cents removed under exportation bonds	1,080,127 5/16	
Tobacco at 16 cents removed under transportation bonds	84,473	
		1,195,010 5/16
Removed during the year ended June 30, 1883:		
Tobacco at 16 cents tax	9,164,311 5/16	
Tobacco at 8 cents tax	1,787,444 5/16	
		10,951,755 1/4
		12,146,766 5/16
3. Exported and accounted for during the year:		
Tobacco, at 24 cents tax	12,955	
Tobacco, at 16 cents tax under exportation bonds	10,150,952	
Tobacco, at 16 cents tax under transportation bonds	81,989	
Tobacco, at 24 cents tax paid on deficiencies	361	
Tobacco, at 16 cents tax paid on deficiencies	1,565	
Tobacco, at 8 cents tax under exportation bonds	932,823 1/4	
		11,180,645 1/4
4. Remaining unaccounted for June 30, 1883:		
Bonds in the hands of United States district attorneys	17,094	
Tobacco, at 16 cents tax removed under exportation bonds	91,922	
Tobacco, at 16 cents tax removed under transportation bonds	2,484	
Tobacco, at 8 cents tax removed under exportation bonds	854,620 5/16	
		966,120 5/16
		12,146,766 5/16

EXPORTATION OF CIGARS AND CIGARETTES IN BOND.

1. Removed and unaccounted for July 1, 1882:	Number.	Number.
Cigars, at $6 per M	242,550	
Cigarettes, at 1.75 per M	4,856,500	
		5,099,050
2. Removed during year ended June 30, 1883:		
Cigars, at $6 per M	2,378,050	
Cigars, at $3 per M	395,325	
Cigarettes, at $1.75 per M	68,413,560	
Cigarettes, at 50 cents per M	8,474,500	
		79,661,435
		84,760,485

3. Exported and accounted for during the year ended June 30, 1883:

	Number.	Number.
Cigars, at $6 per M	2,613,100	
Cigars, at $3 per M	291,325	
Cigarettes, at $1.75 per M	73,039,060	
Cigarettes, at 50 cents per M	3,561,500	
		79,504,985
4. Remaining unaccounted for at the close of the fiscal year ended June 30, 1883:		
Cigars, at $6 per M	7,500	
Cigars, at $3 per M	104,000	
Cigarettes, at $1.75 per M	231,000	
Cigarettes, at 50 cents per M	4,913,000	
		5,255,500
		84,760,485

DATE OF BONDS REMAINING UNACCOUNTED FOR JUNE 30, 1883.

The years in which the bonds were given for the exportation of tobacco, snuff, cigars, and cigarettes remaining unaccounted for by the evidence required by law for their cancellation, on June 30, 1883, are as follows, viz:

Year.	Tobacco, in pounds.	Snuff, in pounds.	Number of cigars.	Number of cigarettes.
1872	17,094			
1873	0			
1874	0			
1875	0			
1876	0			
1877	0			
1878	0			
1879	9,774		7,500	
1880	20,156		6,000	
1881	6,197		0	
1882	15,221		0	95,000
1883	897,678½		98,000	5,049,000
	966,120½		111,500	5,144,000

EXPORTATION OF FRICTION MATCHES, WAX TAPERS, CIGAR LIGHTS, AND PROPRIETARY ARTICLES UNDER SECTION 19 OF THE ACT OF MARCH 1, 1879.

	Number of articles.	Amount of tax.	Number of articles.	Amount of tax.
1 Remaining unaccounted for June 30, 1882	327,063	$3,546 72		
2 Bonded during the year ended June 30, 1883	27,516,958	294,837 78		
			27,844,021	$298,384 50
3 Accounted for as exported during the year	27,393,745	293,425 86		
4 Remaining unaccounted for June 30, 1883	450,276	4,958 64		
			27,844,021	298,384 50

DRAWBACK.

STATEMENT of DRAWBACK of INTERNAL-REVENUE TAXES ALLOWED or EXPORTED MERCHANDISE during the fiscal year ended 1883.

Port.	No. of claims.	Proprietary articles.	Tobacco.	Cigars and cigarettes.	Fermented liquors.	Stills.	Distilled spirits.	Chairs.*	Total.
Baltimore	10	$492 48		$215 25			$30 60		$738 33
Boston	13	1,015 93			$41 63		247 50		1,305 06
Chicago	2				72 14				72 14
Milwaukee	27				899 12				899 12
New York	828	28,242 66	$976 17	2,970 62	1,902 82	$60 00	108 90	$590 92	34,852 09
New Orleans	42			130 00	1,184 36				1,314 36
Philadelphia	8	1,382 61							1,382 61
San Francisco	150	1,424 91	4,628 43	1,879 50	95 27		4,221 00		12,249 11
Saint Louis	44				1,838 82				1,838 82
Rochester	2	371 02							371 02
Suspension Bridge	1	12 96							12 96
Troy	3	58 32							58 32
Total	1,130	33,000 89	5,604 60	5,195 37	6,034 16	60 00	4,608 00	590 92	55,093 94
Allowed 1882	909	33,695 22	5,069 36	1,406 12	3,913 18	60 00	1,966 50		46,110 38

* Exported during the years 1864-'65, 1866, and 1867 under the provisions of section 171, act June 30, 1864.

By the act of March 3, 1883, section 1, all internal-revenue taxes on proprietary articles (perfumery, medicinal preparations, and other articles imposed by Schedule A, following section 3437 R. S.) were repealed; and, as provided in said act, no drawback of tax on such articles exported on and after the 1st day of July, 1883, has been allowed. At the time the act named took effect, however, there were many unadjusted claims covering articles of this description exported prior to July 1, 1883, and the amount so outstanding is estimated at about $25,000, a portion of which has already been allowed during the current fiscal year.

In connection with the foregoing statement attention is called to the fact that while the law, §3244 R. S., authorizes the allowance of drawback on stills when exported, no appropriation has yet been made by Congress for the payment of such drawback. I have therefore to renew the recommendation made in my predecessor's reports for the years 1880, 1881, and 1882 that the necessary appropriation be made for the payment of such drawback, and, in so doing, I would call attention to the following suggestion on the subject which I find on pages CXXX and CXXXI of the last-named report:

> While a number of claims covering stills have been allowed by this office during the past three years, and by the authority conferred by section 3244, yet the claimants in such cases have been unable to recover the amount of drawback so awarded them by this office, in consequence of the failure of Congress to make the necessary appropriation. While the amounts due these claimants are not large, the promise made by the law to this class of taxpayers should, nevertheless, be redeemed, and I urgently call attention to this matter, in order that the payment of these claims may be provided for.

* * * * * * *

ASSESSMENTS ON BANK CAPITAL AND DEPOSITS.

Following is a statement of the amount of taxes assessed on the capital and deposits of banks and bankers during the six months ended November 30, 1882:

States and Territories.	Banks and bankers.		Savings banks.		Total.
	On capital.	On deposits.	On capital.	On deposits.	
Alabama	$3,080 01	$8,593 97			$11,673 98
Arizona	325 61	2,074 86			2,400 47
Arkansas	695 47	1,858 62			2,554 09
California	32,221 78	116,129 27	$2,937 88	$18,005 86	169,294 79
Colorado	3,484 74	12,175 31			15,660 05
Connecticut	7,718 35	17,558 17		6,589 24	31,865 76
Dakota	1,571 55	3,507 11			5,078 66
Delaware	1,429 21	2,673 89		38 35	4,141 45
Florida	389 68	2,417 90			2,807 58
Georgia	8,745 58	12,722 03	75 00	908 59	22,451 80
Idaho	99 89	461 17			561 06
Illinois	22,749 19	134,528 92	113 75	435 18	157,827 04
Indiana	9,794 23	41,146 96		242 33	51,183 52
Iowa	16,151 82	60,010 28	75 00	77 89	76,314 99
Kansas	6,742 65	21,680 35			28,423 00
Kentucky	27,367 43	42,575 90			69,943 33
Louisiana	5,668 69	11,723 00	250 00	07	17,641 76
Maine	183 02	640 21		144 32	967 55
Maryland	7,402 89	26,553 97	77 25	344 18	34,378 29
Massachusetts	15,265 95	45,768 23		234 65	61,268 83
Michigan	7,815 39	49,941 44	412 50	1,759 30	59,928 63
Minnesota	8,087 56	31,302 83		350 99	40,341 38
Mississippi	2,516 73	5,312 11			7,828 84
Missouri	26,483 75	128,320 74			154,804 49
Montana	1,314 30	3,852 06			5,166 36
Nebraska	4,142 63	11,942 80			16,085 43
Nevada	409 33	2,467 64			2,876 97
New Hampshire	125 00	65 25	250 00	1,642 49	2,082 74
New Jersey	2,075 19	10,432 80		154 59	12,662 58
New Mexico	63 55	2,300 04			2,363 59
New York	164,305 94	620,265 56		1,310 60	785,882 10
North Carolina	1,560 89	2 551 04			4,111 93
Ohio	15,792 60	95,512 82	449 41	194 40	111,949 23
Oregon	1,722 52	8,940 28			10,662 80
Pennsylvania	32,946 30	232,090 72	1,245 14	2,332 50	268,614 66
Rhode Island	6,021 23	23,958 29		7,709 33	37,688 85
South Carolina	1,333 24	5,043 22	75 00	5 62	6,457 08
Tennessee	4,347 46	7,412 35			11,759 81
Texas	11,534 32	28,396 65			39,930 97
Utah	759 15	6,428 96			7,188 11
Vermont	686 92	7,523 06		59 21	8,269 19
Virginia	6,221 97	26,518 29	999 67	482 20	34,222 13
Washington	1,180 39	3,100 45			4,280 84
West Virginia	2,849 26	12,986 07			15,835 33
Wisconsin	5,544 16	55,817 76			61,301 92
Wyoming	537 41	2,689 51	8 00	30 64	3,265 56
Total	482,064 93	1,949,973 49	6,968 60	43,052 53	2,482,059 55

MISCELLANEOUS ASSESSMENTS.

The following table shows the assessments made by the Commissioner of Internal Revenue during the fiscal years ended June 30, 1882, and June 30, 1883, respectively, and the increase or decrease on each article or occupation:

	Amount assessed during fiscal year ended—		Fiscal year ended June 30, 1883.	
	June 30, 1882.	June 30, 1883.	Increase over 1882.	Decrease from 1882.
Tax on deficiencies in production of distilled spirits	$108,951 24	$67,072 85	.....	$41,878 39
Tax on excess of materials used in the production of distilled spirits	7,730 78	8,536 11	$805 33	.....
Tax on deposits and capital of banks, bankers, and savings institutions other than national banks	5,222,012 40	2,696,834 36	.....	2,525,178 04
Tax on circulation of banks and others	1,921 81	805 26	.....	1,116 55
Tax on distilled spirits fraudulently removed or seized; also, taxes overdue	63,414 70	1,522,883 12	1,459,468 42	.....
Tax on fermented liquors removed from brewery unstamped	664 65	575 81	.....	88 84
Tax on tobacco, snuff, and cigars removed from factory unstamped	43,095 60	17,651 07	.....	25,444 53
Tax on proprietary articles removed unstamped	5,479 19	1,788 00	.....	3,691 19
Assessed penalties	193,145 24	80,141 45	.....	113,003 79
Legacies and successions	29,085 92	22,918 83	.....	6,167 09
Unassessed and unassessable penalties, interest, taxes previously abated, conscience money, and deficiencies in bonded accounts which have been collected; also, fines, penalties, and forfeitures and costs paid to collectors by order of court or by order of Secretary, and unassessable taxes recovered; also, amount of penalties and interest received for validating unstamped instruments (Form 58)	285,250 80	352,299 72	67,048 92	.....
Special taxes (licenses)	61,415 03	53,588 27	.....	7,826 76
Tax on income and dividends	1,201 44	3,708 19	2,506 75	.....
Total	6,023,308 80	4,828,803 04	.....	1,194,565 76

ASSESSMENTS FOR 1883.

The following statement shows the amount of assessments in each of the several States and Territories of the United States during the fiscal year ended June 30, 1883, and includes the taxes assessed upon capital and deposits of banks and bankers:

Alabama	$18,735 99	Montana	$5,631 79
Arizona	3,724 14	Nebraska	21,459 10
Arkansas	8,404 54	Nevada	3,479 51
California	185,358 62	New Hampshire	3,573 29
Colorado	19,237 53	New Jersey	66,679 24
Connecticut	38,000 82	New Mexico	3,335 18
Dakota	6,134 39	New York	882,069 83
Delaware	4,823 65	North Carolina	28,975 31
Florida	4,083 23	Ohio	189,308 96
Georgia	39,736 90	Oregon	11,693 92
Idaho	943 02	Pennsylvania	522,173 15
Illinois	195,981 25	Rhode Island	225,311 93
Indiana	154,495 58	South Carolina	15,406 26
Iowa	91,417 15	Tennessee	46,475 44
Kansas	30,666 54	Texas	48,849 06
Kentucky	1,016,180 21	Utah	8,146 46
Louisiana	41,417 05	Vermont	9,735 87
Maine	3,668 48	Virginia	48,799 07
Maryland	273,594 54	Washington	5,120 52
Massachusetts	134,613 71	West Virginia	24,902 86
Michigan	71,291 47	Wisconsin	68,551 25
Minnesota	42,951 49	Wyoming	3,563 14
Mississippi	8,719 10		
Missouri	191,382 50	Total	4,828,803 04

The main increase of the assessments made in the last fiscal year over the assessments made during the year ended June 30, 1882, consists in the tax on distilled spirits and amount assessed on what is called Form 58.

The law provides three methods of collecting the tax on distilled spirits remaining in warehouse over three years, viz:

1. Suit on the warehousing bond,
2. Assessment of the tax, and
3. Proceeding by distraint.

Upon consultation with the honorable Secretary of the Treasury it was decided to adopt the second remedy, and $1,473,045.30 were consequently assessed on spirits remaining in warehouse over the legal time of three years. This explains the increase of assessments on this item, and really leaves a decrease of $13,576.88 assessed on spirits fraudulently removed or seized.

Among the assessments made on Form 58 are amounts collected in compromise. These collections were larger than in the previous year, the collections from this source during the last fiscal year being $252,077.78, while in 1882 they were only $211,524.68. This of course helped materially to swell the total amount assessed on Form 58.

The decrease of $2,525,178.04 in the tax assessed on capital, and deposits of banks and bankers, as shown by the above table, is owing to the repeal of said tax by the act of March 3, 1883. Under an opinion of the honorable Attorney-General no taxes on this account were assessed for periods subsequent to November 30, 1882.

Of the tax on deficiency in the production of distilled spirits $41,878.39 less were assessed last fiscal year than in the previous year. Section 6 of the act of March 1, 1879, as amended by section 8 of the act of May 28, 1880, authorizes the Commissioner to remit the assessment of this tax whenever he is satisfied by sufficient evidence that the deficiency was not caused by any want of diligence, or by any fraudulent purpose on the part of the distiller, but was caused by unavoidable accident or by a misunderstanding of the law or regulations. A large number of such cases therefore were disposed of in this manner, which otherwise would have been assessed.

In the fiscal year ending June 30, 1882, a large amount of 100 per centum penalties were assessed against banks and bankers on erroneous returns made by them. The United States Supreme Court having decided such assessments to be illegal, they were not made during the last fiscal year, which explains the decrease of $113,003.79 in this item.

* * * * * * *

I have been urged to make recommendations upon many subjects, and the *precedents* would have justified my doing so where my judgment approved, but I could find no provision of *law* which authorized or directed such a course, nor does your letter of September 10, asking for this report, call for such a response. I have therefore yielded very little to a temptation of that kind, and shall reserve expressions of opinion upon the subjects presented to me until such expressions may be called for by the proper authority.

I have the honor to subscribe myself, very respectfully,

WALTER EVANS,
Commissioner.

Hon. CHARLES J. FOLGER,
Secretary of the Treasury.

REPORT OF THE COMPTROLLER OF THE CURRENCY.

TREASURY DEPARTMENT,
OFFICE OF COMPTROLLER OF THE CURRENCY,
Washington, December 1, 1883.

I have the honor to submit for the consideration of Congress the twenty-first annual report of the Comptroller of the Currency, in compliance with section 333 of the Revised Statutes of the United States.

Two hundred and sixty-two banks have been organized during the year ending November 1, 1883, with an aggregate authorized capital of $28,654,350; circulating notes have been issued to these new associations amounting to $7,909,190. This is the largest number of banks organized in any year since 1865.

The following table gives the number of banks organized in each State and Territory, with their aggregate capital and circulation:

States and Territories.	No. of banks.	Capital.	Bonds deposited.	Circulation issued.
Texas	23	$1,741,000	$487,500	$404,960
Ohio	22	2,850,000	1,213,000	1,091,700
Iowa	21	1,560,000	452,500	407,090
Pennsylvania	20	1,317,200	776,500	660,600
Illinois	18	5,050,000	647,500	492,710
Nebraska	17	950,000	353,000	306,370
Kansas	15	785,000	240,000	159,690
New York	14	1,405,000	865,000	711,990
Dakota	12	600,000	169,000	152,030
Missouri	10	880,500	477,250	415,990
Kentucky	10	672,650	358,100	288,500
Michigan	9	2,410,000	285,000	242,990
Minnesota	8	2,910,000	206,500	185,850
Washington Ter	8	400,000	152,500	137,250
Indiana	7	500,000	312,500	272,230
Wisconsin	5	400,000	120,000	107,990
Oregon	5	260,000	83,400	75,020
New Jersey	4	253,000	213,000	191,700
California	3	250,000	112,500	45,000
Colorado	3	110,000	72,500	65,250
Tennessee	2	630,000	62,500	45,000
Massachusetts	2	400,000	400,000	360,000
Connecticut	2	350,000	110,000	90,000
Vermont	2	300,000	285,000	256,500
Montana	2	300,000	97,500	87,740
Virginia	2	100,000	62,500	38,250
Mississippi	2	100,000	80,000	72,000
Arkansas	2	100,000	75,000	67,500
Idaho	2	100,000	25,200	22,750
Rhode Island	1	225,000	200,000	180,000
Louisiana	1	200,000	50,000	.....
Alabama	1	100,000	25,000	22,500
Utah	1	100,000	100,000	90,000
Delaware	1	80,000	50,000	33,300
Maryland	1	60,000	28,000	25,200
West Virginia	1	55,000	15,000	13,500
North Carolina	1	50,000	50,000	45,000
Georgia	1	50,000	50,000	45,000
Arizona	1	50,000	12,500	.....
Total	262	28,654,350	9,375,550	7,909,190

These banks are located by geographical divisions, as follows: Eastern States, seven banks, with capital of $1,275,000; Middle States, forty, with capital of $3,115,200; Southern States, forty-six, with capital of $3,798,650; Western States, one hundred and thirty-two, with capital of $18,295,500; Pacific States, eleven, with capital of $620,000; and Territories, twenty-six, with capital of $1,550,000.

Forty banks, with aggregate capital of $7,736,000 and circulation of $4,137,033, have voluntarily discontinued business during the year; twelve of which were succeeded by other banks, located in the same places, with nearly the same shareholders. Two national banks, with an aggregate capital of $250,000, during the year ending November 1, 1883, have been placed in the hands of receivers, making eighty-nine in all since the establishment of the system.

The total number of banks which have voluntarily closed their affairs by a vote of shareholders owning two-thirds of their stock, under sections 5220 and 5221 of the United States Revised Statutes, has been 450, of which 67 were placed in liquidation, in anticipation of the approach of the termination of their corporate existence, for the purpose of organizing new banks as their successors.

The shareholders of ten banks in all have permitted their corporate existence to expire, and these associations are in liquidation under section 7 of the act of July 12, 1882. National banks are organized in every State of the Union and in every organized Territory. The total number in operation on November 1 was twenty-five hundred and twenty-two, the largest number that has been in operation at any one time.

COMPARATIVE STATEMENTS OF THE NATIONAL BANKS FOR ELEVEN YEARS.

The following table exhibits the resources and liabilities of the national banks for eleven years, at nearly corresponding dates, from 1873 to 1883, inclusive:

	Sept. 12, 1873.	Oct. 2, 1874.	Oct. 1, 1875.	Oct. 2, 1876.	Oct. 1, 1877.	Oct. 1, 1878.	Oct. 2, 1879.	Oct. 1, 1880.	Oct. 1, 1881.	Oct. 3, 1882.	Oct. 2, 1883.
	1,976 banks.	2,004 banks.	2,087 banks.	2,089 banks.	2,080 banks.	2,053 banks.	2,048 banks.	2,090 banks.	2,132 banks.	2,269 banks.	2,501 banks.
RESOURCES.											
	Millions.	*Millions.*	*Millions.*	*Millions.*	*Millions.*	*Millions.*	*Millions.*	*Millions.*	*Millions.*	*Millions.*	*Millions.*
Loans	944.2	954.4	984.7	931.3	891.9	834.0	878.5	1,041.0	1,173.8	1,243.2	1,309.2
Bonds for circulat'n.	388.3	383.3	370.3	337.2	336.8	347.6	357.3	357.8	363.3	357.6	351.4
Other U. S. bonds	23.6	28.0	28.1	47.8	45.0	94.7	71.2	43.6	56.5	37.4	30.7
Stocks, bonds, &c	23.7	27.8	33.5	34.4	34.5	36.9	39.7	48.9	61.9	66.2	71.1
Due from banks	149.5	134.8	144.7	146.9	129.9	138.9	167.3	213.5	230.8	198.9	208.9
Real estate	34.7	38.1	42.4	43.1	45.2	46.7	47.8	48.0	47.3	46.5	48.3
Specie	19.9	21.2	8.1	21.4	22.7	30.7	42.2	109.3	114.3	102.9	107.8
Legal-tender notes	92.4	80.0	76.5	84.2	66.9	64.4	69.2	56.6	53.2	63.2	70.7
Nat'l-bank notes	16.1	18.5	18.5	15.9	15.6	16.9	16.7	18.2	17.7	20.7	22.7
C. H. exchanges	100.3	109.7	87.9	100.0	74.5	82.4	113.0	121.1	189.2	208.4	96.4
U. S. cert. of deposit	20.6	42.8	48.8	29.2	33.4	32.7	26.8	7.7	6.7	8.7	10.0
Due from U.S. Treas	.....	20.3	19.6	16.7	16.0	16.5	17.0	17.1	17.5	17.2	16.6
Other resources	17.3	18.3	19.1	19.1	28.7	24.9	22.1	23.0	26.2	28.9	28.9
Totals	1,830.6	1,877.2	1,882.2	1,827.2	1,741.1	1,767.3	1,868.8	2,105.8	2,358.4	2,399.8	2,372.7
LIABILITIES.											
Capital stock	491.0	493.8	504.8	499.8	479.5	466.2	454.1	457.6	463.8	483.1	509.7
Surplus fund	120.3	129.0	134.4	132.2	122.8	116.9	114.8	120.5	128.1	132.0	142.0
Undivided profits	54.5	51.5	53.0	46.4	44.5	44.9	41.3	46.1	56.4	61.2	61.6
Circulation	340.3	334.2	319.1	292.2	291.9	301.9	313.8	317.3	320.2	315.0	310.5
Due to depositors	640.0	683.8	679.4	666.2	630.4	668.4	736.9	887.9	1,063.1	1,134.9	1,063.6
Due to banks	173.0	175.8	179.7	179.8	161.6	165.1	201.2	267.9	294.9	259.9	270.4
Other liabilities	11.5	9.1	11.8	10.6	10.4	7.9	6.7	8.5	11.9	13.7	14.9
Totals	1,830.6	1,877.2	1,882.2	1,827.2	1,741.1	1,767.3	1,868.8	2,105.8	2,358.4	2,399.8	2,372.7

The different items of resources and liabilities have generally increased during the last eleven years, as will be seen by reference to the previous table, but the items of United States bonds and circulation

have decreased considerably during the past year. The item of individual deposits has largely decreased. This large reduction is chiefly in the city of New York, and is to be accounted for by the fact that those banks doing business with brokers have, during the past year, exchanged checks to a large amount among themselves, instead of sending them through the clearing-house for payment as heretofore, thus causing a reduction of 105 millions in the item of exchanges for the clearing-house, under the head of resources, and a reduction of 104 millions in the individual deposits, under the head of liabilities.

The following table exhibits the resources and liabilities of the national banks at the close of business on the 2d day of October, 1883; the returns from New York City, Boston, Philadelphia and Baltimore, from the other reserve cities, and from the remaining banks of the country, being tabulated separately:

	New York City.	Boston, Philadelphia, and Baltimore.	Other reserve cities.*	Country banks.	Aggregate.
	48 banks.	103 banks.	97 banks.	2,253 banks.	2,501 banks.
RESOURCES.					
Loans and discounts	$245,108,332	$200,815,928	$151,364,826	$706,161,705	$1,303,450,791
Overdrafts	361,471	57,643	372,486	5,002,391	5,793,991
Bonds for circulation	18,277,500	49,002,050	27,232,250	256,901,050	351,412,850
Bonds for deposits	820,000	661,000	4,153,000	11,447,000	17,081,000
U. S. bonds on hand	2,296,050	334,150	2,508,000	8,454,850	13,593,050
Other stocks and bonds	13,017,588	7,430,507	5,487,844	45,178,092	71,114,031
Due from reserve agents		22,902,211	17,896,779	84,119,738	124,918,728
Due from other national banks.					
Due from other banks and bankers	17,336,757	14,457,637	8,147,081	25,773,754	65,714,229
Real estate, furniture, and fixtures	2,800,515	1,729,484	3,436,345	10,299,931	18,266,275
Current expenses	1,077,693	732,879	829,821	4,167,935	6,808,327
Premiums	632,153	690,818	1,031,892	5,709,210	8,064,073
Checks and other cash items	2,696,132	1,170,960	797,656	8,917,945	13,582,693
Exchanges for clearing-house	69,207,772	18,272,166	7,304,803	1,568,472	96,353,213
Bills of other national banks	1,812,886	2,842,064	3,094,672	14,924,183	22,673,805
Fractional currency	45,399	38,416	53,508	306,628	443,951
Specie	50,274,174	13,079,936	13,210,679	31,253,195	107,817,984
Legal-tender notes	17,117,605	8,222,711	15,097,081	30,245,600	70,682,997
U. S. certificates of deposit	2,560,000	4,405,000	2,410,000	585,000	9,900,000
Five per cent. redemption fund	857,994	2,200,489	1,213,349	11,319,192	15,591,024
Due from U. S. Treasurer	190,320	132,222	152,178	520,968	995,688
Totals	457,217,563	355,759,618	269,865,150	1,289,814,034	2,372,656,365
LIABILITIES.					
Capital stock	50,350,000	80,298,330	51,306,500	327,684,957	509,639,787
Surplus fund	23,875,025	23,313,375	12,781,471	82,080,611	142,000,482
Undivided profits	11,283,715	6,960,434	5,481,854	37,820,956	61,551,959
National bank notes outstanding	15,384,205	43,521,339	23,955,758	227,656,555	310,517,857
State bank notes outstanding	39,078	21,396		123,883	184,357
Dividends unpaid	223,163	915,649	304,001	1,886,413	3,229,226
Individual deposits	221,672,303	152,012,932	120,938,735	554,813,731	1,049,437,701
U. S. deposits					
Deposits of U. S. disbursing officers	420,095	439,451	2,694,564	6,629,087	10,183,197
	225,400		1,036,712	2,718,148	3,980,260
Due to national banks	96,578,148	37,287,071	28,133,291	24,830,167	186,828,677
Due to other banks and bankers	37,167,431	10,727,517	20,833,616	14,853,508	83,602,072
Notes and bills rediscounted			1,290,648	6,096,889	7,387,537
Bills payable		256,124	1,178,000	2,619,129	4,053,253
Totals	457,217,563	355,759,618	269,865,150	1,289,814,034	2,372,656,365

*The reserve cities, in addition to New York, Boston, Philadelphia, and Baltimore, are Albany, Pittsburgh, Washington, New Orleans, Louisville, Cincinnati, Cleveland, Chicago, Detroit, Milwaukee, Saint Louis and San Francisco.

The following table exhibits, in the order of their capital, the twenty-five States having the largest amount of capital, together with the amount of circulation, loans and discounts, and individual deposits of each, on October 2, 1883:

States.	Capital.	Circulation.	Loans and discounts.	Individual deposits.
Massachusetts	$96,602,500	$65,399,957	$194,174,670	$116,025,957
New York	86,894,160	43,118,938	344,212,695	308,139,245
Pennsylvania	59,260,690	41,169,979	160,013,725	151,619,862
Ohio	35,183,250	23,147,825	76,324,073	59,615,288
Connecticut	25,926,820	17,110,998	42,183,406	22,542,418
Illinois	23,003,524	8,592,210	75,256,750	67,820,691
Rhode Island	20,540,050	14,187,208	30,811,846	11,719,313
Maryland	14,208,030	8,628,665	33,688,326	25,571,570
Indiana	14,028,500	8,595,020	28,744,861	23,542,138
Kentucky	12,567,900	9,434,261	22,455,533	13,578,490
New Jersey	12,203,350	9,351,479	33,349,099	29,700,324
Michigan	11,065,000	4,973,395	32,977,575	26,803,880
Maine	10,485,000	8,080,063	18,778,198	10,032,018
Minnesota	9,151,600	2,126,524	24,084,505	17,036,350
Iowa	9,055,000	4,596,303	20,124,327	16,647,922
Vermont	7,986,000	6,512,779	12,054,046	5,455,001
New Hampshire	6,155,000	5,278,237	8,536,853	4,982,532
Missouri	5,850,000	2,117,560	16,808,317	11,622,696
Tennessee	4,315,300	2,567,660	10,475,195	8,419,187
Wisconsin	4,035,000	2,182,943	13,841,561	14,499,471
Texas	3,652,250	1,462,100	10,099,212	8,002,525
California	3,550,000	1,477,350	8,175,066	8,124,377
Virginia	3,496,300	2,614,900	12,958,703	12,385,827
Nebraska	2,860,000	1,547,395	9,732,259	9,419,110
North Carolina	2,401,000	1,152,270	4,832,129	3,214,853

NUMBER, CAPITAL, AND DEPOSITS OF NATIONAL BANKS, STATE AND SAVINGS BANKS, AND PRIVATE BANKERS.

Section 333 of the Revised Statutes of the United States requires the Comptroller to present annually to Congress a statement of the condition of the banks and savings banks organized under State laws. Returns of capital and deposits have hitherto been made by these institutions and by private bankers semi-annually to this Department for purposes of taxation. From these returns the following table has been compiled, exhibiting in concise form, by geographical divisions, the total average capital and deposits of all the State and savings banks and private bankers of the country, for the six months ending November 30, 1882:

Geographical divisions.	State banks and trust companies.			Private bankers.			Savings banks with capital.			Savings banks without capital.	
	No.	Capital.	Deposits.	No.	Capital.	Deposits.	No.	Capital.	Deposits.	No.	Deposits.
		Mill's.	*Mill's.*		*Mill's.*	*Mill's.*		*Mill's.*	*Mill's.*		*Mill's.*
New England States	40	8.30	31.64	94	6.22	6.57	2	0.10	0.89	420	436.25
Middle States	210	40.60	244.02	907	62.42	112.69	8	0.63	5.34	171	486.98
Southern States	248	25.34	45.94	289	6.33	20.68	7	0.56	1.50	2	1.80
Western States and Territories	563	48.90	168.40	2062	30.31	149.02	25	2.73	35.74	32	35.23
United States	1061	123.14	490.00	3412	105.28	288.96	42	4.02	43.47	625	960.26

The capital of the 2,308 national banks in operation on December 30, 1882, as will be seen by a table in the Appendix, was $484,883,492, not

including surplus, which fund at that date amounted to more than 135 millions of dollars; while the average capital of all the State banks, private bankers, and savings banks, for the six months ending November 30, 1882, was but $232,435,330. The latter amount is less than two-fifths of the combined capital and surplus of the national banks.

The table below exhibits the capital and net deposits of the national banks on December 30, 1882, together with the aggregate average capital and deposits of all classes of banks other than national for the six months ending November 30, 1882:

Geographical divisions.	State banks, savings banks, private bankers, &c.			National banks.			Total.		
	No.	Capital.	Deposits.	No.	Capital.	Deposits.	No.	Capital.	Deposits.
		Millions.	*Millions.*		*Millions.*	*Millions.*		*Millions.*	*Millions.*
New England States.	556	14.62	475.35	560	166.23	193.15	1,116	180.85	668.50
Middle States	1,356	103.66	849.03	691	173.19	556.55	2,047	276.85	1,405.58
Southern States	546	32.23	69.90	214	34.80	68.84	760	67.03	138.74
Western States and Territories	2,682	81.93	388.42	843	110.66	301.28	3,525	192.59	689.70
United States	5,140	232.44	1,782.70	2,308	484.88	1,119.82	7,448	717.32	2,902.52

The total number of banks and bankers in the country at the date named was 7,448, with a total banking capital of $717,318,822, and total deposits of $2,902,522,245.

In the Appendix will be found similar tables for various periods from 1875 to 1882. On a subsequent page in this report, under the head of "State banks, savings banks, and trust companies," will be found tables showing the resources and liabilities of these corporations for the present year, and in the Appendix similar results for previous years.

A table arranged by States and principal cities, giving the number, capital, and deposits, and the tax thereon, of all banking institutions other than national, and of the private bankers of the country, for the six months ending November 30, 1882, and for previous years, will also be found in the Appendix.

The following table exhibits, for corresponding dates nearest to May 31, in each of the last seven years, and to November 30, 1882, the aggregate amounts of the capital and deposits of each of the classes of banks given in the foregoing table:

Years.	National banks.			State banks, private bankers, &c.			Savings banks with capital.			Savings banks without capital.		Total.		
	No.	Capital.	Deposits.	No.	Capital.	Deposits.	No.	Capital.	Deposits.	No.	Deposits.	No.	Capital.	Deposits.
		Mill's.	*Mill's.*		*Mill's.*	*Mill's.*		*Mill's.*	*Mill's.*		*Mill's.*		*Mill's.*	*Mill's.*
1876	2,091	500.4	713.5	3,803	214.0	480.0	26	5.0	37.2	691	844.6	6,611	719.4	2,075.3
1877	2,078	481.0	768.2	3,709	218.6	470.5	26	4.9	38.2	676	843.2	6,579	704.5	2,120.1
1878	2,056	470.4	677.2	3,799	202.2	413.3	23	3.2	26.2	668	803.3	6,450	675.8	1,920.0
1879	2,048	455.3	713.4	3 639	197.0	397.0	29	4.2	36.1	644	747.1	6,360	656.5	1,893.5
1880	2,076	455.9	900.8	3 798	190.1	501.5	29	4.0	34.6	629	783.0	6,532	650.0	2,219.9
1881	2,115	460.2	1,039.9	4,016	206.5	627.5	36	4.2	37.6	629	862.3	6,796	670.9	2,067.3
1882	2,239	477.2	1,131.7	4,403	231.0	747.6	38	3.9	41.3	622	929.8	7,302	712.1	2,850.4
1882*	2,308	484.9	1,119.8	4,473	228.4	779.0	42	4.0	43.5	625	960.2	7,448	717.3	2,902.5

It will be noticed that the first two tables of this chapter are for the six months ending November 30, while all similar tables in previous reports have been for the six months ending May 31. The law repealing the tax on capital and deposits of State banks and private bankers went into effect on November 30, 1882, in accordance with the opinion of the Attorney-General, and for this reason the Comptroller has given the returns to that date, which will be the last data to be obtained from this source.

In the last table of the series the returns are given for the six months ending May 31, 1882, and also for the six months ending November 30, of the same year.

EXTENSION OF THE CORPORATE EXISTENCE OF NATIONAL BANKS.

At the date of my last report, the corporate existence of 86 national banks had expired, and 30 of these banks had extended their existence under act of July 12, 1882; 52 banks went into voluntary liquidation, and were succeeded by other associations organized in place thereof, chiefly previous to the act of July 12, 1882, which authorized the extension of the corporate existence for a new period of twenty years of national banks whose franchises were about to terminate. The 4 remaining banks expired by limitation and did not effect new organizations. The number of national banks organized under act of February 25, 1863, which were in operation at the date of my last report, December 2, 1882, was 307, as follows:

Date.	No of banks.	Capital.	Circulation.
December, 1882	10	$1,420,000	$1,278,000
January, 1883	3	400,000	360,000
February, 1883	294	69,793,250	53,222,170

Of these banks, 273 have extended their corporate existence under act of July 12, 1882; 17 have been placed in liquidation by vote of shareholders of the bank, and 4 have expired by limitation. All of these banks which have been placed in liquidation and have expired by limitation, with the exception of two, have been succeeded by new associations, organized in the same localities with different titles.

All of the banks organized under act of February 25, 1863, ceased to exist by the terms of the act on or before twenty years from the date of its passage; but the banks organized under act of June 3, 1864, have succession for twenty years from the date of their organization, section 8 of that act providing that each association

> Shall have power to adopt a corporate seal, and shall have succession by the name designated in its organization certificate, for the period of twenty years from its organization, unless sooner dissolved according to the provisions of its articles of association, or by the act of its shareholders owning two-thirds of its stock, or unless the franchise shall be forfeited by a violation of this act.

The provisions of the act of July 12, 1882, authorizing national banking associations to extend their corporate existence are readily understood, and have proved to be well adapted for the purpose. Stockholders have not always assented to the proposed extension of corpo-

rate existence under the law, but up to this date such differences have been amicably arranged without the appeal to the Comptroller, provided for in section 5 of the act. Banks whose corporate existence does not expire until 1885 have already applied to the Comptroller for authority to extend their corporate existence, but he does not consider that, under the law, he would be justified in issuing a certificate to a bank so long previous to the expiration of its first period of succession.

Before granting the extension, the law requires that he shall in every case make an examination of the bank applying therefor, and satisfy himself with regard to the character of the assets held by the bank. It would be manifestly not in accordance with the spirit of the law for the Comptroller to make an examination, and upon such an examination issue a certificate for the extension of the existence of a bank, to take effect many months thereafter, as it is possible that a bank in excellent condition at that time might, before the extension became operative, experience a serious impairment of its capital stock. The Comptroller has therefore declined such requests, and no certificate authorizing extension will be given to any bank until within a period of about four months previous to date of expiration of its franchise.

The whole number of banks now in operation, which organized under the act of June 3, 1864, whose periods of succession will terminate during each year previous to 1900, is 1,595, with capital and circulation as follows:

Years.	No. of banks.	Capital.	Circulation.
1884	240	$89,611,570	$60,526,825
1885	727	185,936,715	124,807,450
1886	19	2,715,300	1,758,250
1887	6	1,100,000	976,500
1888	11	1,300,000	719,100
1889	3	600,000	540,000
1890	63	9,290,500	6,419,950
1891	104	13,193,900	9,120,880
1892	103	12,879,600	8,300,870
1893	39	4,740,000	3,849,400
1894	67	7,638,000	5,819,150
1895	82	10,517,000	7,695,180
1896	23	1,968,800	1,525,500
1897	29	3,019,000	2,151,000
1898	27	2,649,600	2,208,600
1899	43	4,930,000	3,910,900
Total	1,595	352,089,985	240,329,555

In the Appendix will be found a table giving the date of the expiration of the corporate existence of each of the banks whose period of succession will expire during the year 1884, with the amount of capital and the outstanding circulation of each bank.

CONTRACTION OF NATIONAL-BANK CIRCULATION.

The Secretary of the Treasury has been compelled, on account of the large receipts of revenue in excess of expenditures, to call in rapidly for payment that portion of the bonded debt which is payable at the pleasure of the United States. During the year ending November 1 more than 105 millions ($105,322,450) of the public debt has been paid, and all of the remaining three-and-a-half per cent. bonds, amounting to $91,596,250, have been called for payment, and ceased to bear interest

on November 1. Notwithstanding the fact that 262 new banks were organized during the past year, with a capital of $28,654,350, depositing $9,375,550 of bonds as a security for circulating notes, the aggregate amount on deposit for that purpose has diminished from $362,490,650 to $352,907,300, a reduction of $9,583,350. More than 40 millions of three and a half per cents held by the banks on November 1, 1882, have been withdrawn or called for payment; the threes have increased less than 22 millions, and the fours and four and a halfs less than 9 millions.

During the month of September, fifteen millions of three per cents were called by the Secretary, and during October fifteen millions, and on November 17, ten additional millions, an aggregate of forty millions, of which about eighteen millions belong to the banks. The remainder of the bonds outstanding payable at the pleasure of the Government consist of 265 millions of threes, and of these the national banks hold more than two-thirds. Unless there shall be legislation by the present Congress which shall reduce the receipts of the Government, it is probable that the United States bonds will continue to be paid at the same rate as during the past year, in which event all the threes will be called for redemption within the next three years. This will reduce the bonds held by the banks from 353 millions to 151 millions, and cause a contraction in the national-bank circulation of about 60 millions per annum. This large contraction will be somewhat reduced by the action of those banks which substitute four and four and a half per cents in place of the threes; but the amount of long bonds held by the banks may also be reduced by that class of banks which may conclude that it is for their interest to avail themselves of the premium at the time when, in their opinion, the value of said bonds shall reach their maximum price in the market.

The total amount of bonds outstanding, held by the banks and by the people, which are available for circulation, and not payable at the pleasure of the Government, and which cannot be redeemed except by purchase in the market, is as follows:

Four per cents, payable July 1, 1907		$737,946,550
Four and a half per cents, payable September 1, 1891		250,000,000
Pacific Railway sixes, payable September 1, 1895	$3,002,000	
Pacific Railway sixes, payable September 1, 1896	8,000,000	
Pacific Railway sixes, payable September 1, 1897	9,712,000	
Pacific Railway sixes, payable September 1, 1898	29,383,000	
Pacific Railway sixes, payable September 1, 1899	*14,526,512	
		64,623,512
		1,052,570,062

It is evident that unless there is additional legislation the bonds held as security for circulation will rapidly diminish. New legislation may, however, postpone the payment of the public debt, or cause the profit on circulation to increase sufficiently to induce the national banks to invest in the long four per cents, which are not to mature for a period of twenty-four years. The contraction of the bank circulation may be avoided by reduction of the redundant revenue, and there is no doubt that this is the true policy. "The radical cure for the evil" of an accumulation of a large surplus, says the Secretary in his last report, "is in the reduction of taxation, so that no more will be taken from the people than enough to carry on the Government with economy, to meet all its obligations that must be met from year to year, to pay off with reasonable celerity the part of the debt which it may pay at pleasure, and to provide, through the sinking fund, for the payment of

*$483,512 of this amount is payable in 1900, and $4,680 in 1908.

that which will become payable by and by. The evil comes from the likelihood of the Government holding, from time to time, a large surplus to be poured out in volume at uncertain and unforeseen times, and at times often inopportune for the business of the country. There could not be that surplus, surely not so great a one, if the subjects of taxation were lessened, and the rates made smaller upon those retained."

The contraction of the bank circulation may also be avoided by the conversion of the long bonds into three per cents, by offering inducement to the holders of these bonds to exchange them for three per cents to mature in 1907, the Government paying to the holders thereof a reasonable amount for their difference in value. The principal objection made to this proposition is, that the Government would pay to the holders a large premium upon the bonds held by them, but it is evident that in the course of two or three years, after the three per cents are paid, if there is no reduction in the revenue, the surplus will enormously increase, unless the long bonds are then purchased by the Government at a rate to be then fixed by the holders thereof, which will be a rate much higher than that now proposed. The premium to be paid to the holders of these long bonds may be considerably reduced by providing that the circulation to be issued upon the proposed bonds when deposited by the national banks as security therefor shall not be subject to the present tax of 1 per cent. per annum, or by postponing the time for their payment. Such legislation would make the new bonds more valuable for this purpose than for any other, and would be likely to prevent their withdrawal until maturity, if once deposited, and for this reason the bonds would be more desirable as a basis for circulation than any which have heretofore been issued.

The contraction would also be avoided by providing for the removal of the tax on circulation, and the increase of the amount of circulation to be issued to the banks upon the bonds deposited by them.

The Comptroller, in discussing this subject in his report for 1882, said:

> If the public debt is to be paid hereafter as rapidly as during the past three years, all of the interest-bearing bonds will soon be surrendered and canceled, and there is danger that the bank circulation will be so rapidly retired as to cause a contraction of the currency, which will affect the price of commodities and create embarrassments in business; but there is now no such pressing necessity for a speedy payment of the public debt as there is for the reduction of the redundant revenue. It is believed that Congress will soon provide for so large a reduction of the revenue that a sufficient amount of bonds will remain for the security of the bank circulation. * * *
>
> If the whole public debt were reduced to a uniform rate of 3 per cent., the present high premium upon bonds would almost entirely disappear, and the volume of circulation would respond more readily to the demands of business. The temptation to sell such bonds for the purpose of realizing the premium would no longer remain. A proposition for refunding all the bonds, not payable at the pleasure of the Government, into three per cents, was suggested during the last session of Congress. The proposition is that inducements be offered to the holders of the four and four and a-half per cent. bonds to surrender them to the Government, receiving in payment therefor three per cent. bonds having the same dates of maturity as the bonds which are to be surrendered. The new three per cent. bonds issued would themselves bear a small premium, and it is believed that the holders of four per cents would consent to such an exchange if accompanied by an offer of not more than 15 per cent. premium. The amount of the premium upon this class of bonds, say 700 millions, now outstanding at 15 per cent., would be 105 millions of dollars, and this premium could be paid, as the bonds are surrendered for exchange, from the surplus revenue of the Government, thus in effect reducing the debt of the Government 105 millions by a prepayment of interest which must be paid at a greater rate each year until their maturity.
>
> The benefits of this plan both to the holder and to the Government are apparent. The holders would receive, in the shape of 15 per cent. premium upon the bonds, a portion of their interest in advance, which would be available for loans at rates greatly exceeding the borrowing power of the Government, which is now less than 3 per cent. The Government would be enabled by this use of its surplus to save a portion of the interest which otherwise it would be compelled to pay hereafter. * * *

One alternative would be to reduce the tax upon circulation, and another to amend section 12 of the act of July 12, 1882, so as to authorize the banks to receive circulation at the rate of 90 per cent. upon the average current market value of the bonds for the six months previous. If the bonds shall decline in the market, additional bonds may be required to be deposited, or the interest may be retained by the Treasurer, upon notice from the Comptroller, to make up the deficiency. Such an amendment has frequently been suggested, and, in fact, the original national bank act authorized the issue of circulating notes to the amount of 90 per centum of the current market value of United States six per cent. bonds deposited, provided that such 90 per centum was not in excess of the amount of the bonds at their par value, or in excess of the paid-in capital stock. The law also provided for the deposit of additional bonds or money upon their depreciation, to remain so long as the depreciation should continue.

It is submitted that the issue of circulation upon four and four-and-a-half per cents at 90 per cent. upon their current market value, under a restriction similar to that last mentioned, is equally safe with the issue of 90 per cent. upon the three per cents now outstanding at par; or that a reduction of tax upon circulation to one-half of 1 per cent., or to an amount sufficient to reimburse the Treasury for the whole expense of the issue of bank circulation and all expenses incident thereto, is not unreasonable in view of the fact of the large reduction upon the income derived from United States bonds, amounting to more than 2 per cent. since this tax was imposed.

Other propositions have been suggested in order to postpone or prevent the contraction of national-bank circulation which is now imminent, but the Comptroller considers that, so long as there is a sufficient amount of United States bonds outstanding, legislation should be so shaped as to continue them in use as a basis for national-bank circulation. When the national-bank act was passed twenty years ago, it authorized the issue of bank notes equal in amount to 90 per cent. of the current market value of the bonds, but not exceeding par, nor above the amount of the capital of each bank. The only Government bonds then in existence bore interest at the rate of 6 per cent., and the amount of circulation was limited to 300 millions. Subsequently, on March 3, 1865, when this section of the act was amended so as to issue circulating notes at the same rate, but also in proportion to capital, the amount of circulation was also limited to 354 millions, and the amount of bonds then outstanding bore interest at the rate of either 5 or 6 per cent. The bonds held by the national banks on November 1 of that year consisted exclusively of five and six percents, amounting in the aggregate to $367,549,412, of which $128,503,212 were sixes and $239,046,200 were fives. The great change, since that date, in the securities held by the banks may be seen by reference to the following table, which gives the kind and amount of bonds held on November 1, 1882 and 1883.

	1882.		1883.
Four and a halfs	$33,754,650	Four and a halfs	$41,319,700
Fours	104,927,500	Fours	106,164,850
Three and a halfs ...	40,606,950	Three and a halfs ...	632,000
Threes	179,675,550	Threes	201,327,750
Pacific sixes	3,526,000	Pacific sixes	3,463,000
	362,490,650		352,937,300

The interest upon bonds deposited was then from 2 to 3 per cent. greater than at present, and the profit on circulation about 2½ per cent. There is now only a nominal profit on circulation issued upon United States bonds, and many of the banks which have organized during the past year whose bonds have already been called for payment have experienced a loss of the amount of premium paid for such bonds.

The yearly profit on circulation based upon 4 per cent. bonds may be seen in the following table:*

$100,000 fours at 21 per cent. premium, annual interest			$4,000
Circulation 90 per cent. on par value	$90,000		
Deduct 5 per cent. redemption fund	4,500		
Loanable circulation	85,500	at 6 per cent,	5,130
Gross receipts			9,130
Deduct 1 per cent. tax		900	
Deduct cost redemption		30	
Deduct $\frac{2}{47}$ premium		894	
			1,824
Net receipts			7,306
$121,000 loaned at 6 per cent			7,260
Profit on circulation			46

If the rate of interest was 7 per cent. there would be no profit. The annual profit on $100,000 four and a half per cent. bonds at 14 per cent. premium, the rate of interest being 6 per cent., would be $110, and at 7 per cent. there would be no profit.

At the time of the organization of the system, and since that time, the law has authorized the issue to a bank of $100,000 capital, circulation at the rate of 90 per cent. upon securities having a market value equal to the capital. The value of $100,000 of four per cents is now $121,000, upon which only $90,000 of bonds are issued, the margin being 31 per cent. instead of 10 per cent. as formerly, while the banks at the same time, under act of June 20, 1874, are required to keep on deposit with the Treasurer a five per cent. redemption fund, which amounts in the aggregate to an average of about 15 millions of dollars. Thus it will be seen that with the decrease of interest and decrease of profit upon circulation, the amount of issue upon the value of the bonds has also decreased. There is no propriety or justice in authorizing the issue of ninety dollars upon every one hundred dollar three per cent. bond worth par, and refusing to issue a like proportion upon a four per cent. bond worth one hundred and twenty-one dollars. The holder of a Government bond can readily borrow money upon it as a pledge from a bank to the amount of 95 per cent. of its market value, and it is not surprising that banks should prefer to relinquish their circulation rather than deposit as security bonds having a margin of more than one-third of the circulation issued.

A law authorizing increase of issue to 90 or 95 per cent. upon the lowest market price during the calendar or fiscal year previous to the deposit, together with the repeal of the tax upon circulation, would result in the deposit of a sufficient amount of the four and four-and-a-half per cents to maintain the circulation at about its present aggregate.

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*In this computation the premium is deducted in 23¼ equal annual installments, and the 5 per cent. fund is regarded as reducing the loanable circulation. If the interest to be derived from successive re-investments of all receipts be taken into the computation, the profits are greater.

E. B. Elliott, esq., Government Actuary, computes that the *entire* profit on circulation during the twenty-four years from July 1, 1883, which the bonds have to run to maturity, based on the four per cent. bonds of 1907, the realized rate of interest being assumed at five per cent. per annum, and re-invested quarter-yearly, is 11.14 per cent. on the amount invested. If the realized rate of interest be assumed at six per cent., the *entire* profit will be 7.47 per cent. If the realized rate of interest be taken at seven per cent., the *entire* profit will be 4.33 per cent.

The *yearly* profit on circulation on these bonds, the realized rate of interest being assumed at five per cent. per annum, re-invested quarter-yearly, is $\frac{8}{100}$ of one per cent. on the amount invested If the realized rate be assumed at six per cent., the corresponding *yearly* profit will be $\frac{5}{100}$ of one per cent. If the realized rate be taken at *seven per cent., the yearly* profit on circulation will be $\frac{3}{100}$ of one per cent.

Section 6 of the act of July 12, 1882, provides that any gain that may arise from the failure to present the circulating notes of the national banks shall inure to the benefit of the United States; and in order to ascertain the amount of such circulating notes, it is provided that new circulation, readily distinguishable from the circulating notes before issued, shall be issued to such banks as shall, under the law, be authorized to renew their corporate existence. It is believed that the gain arising from the accidental loss or destruction of circulating notes will amount to from 1 to 1½ per cent. upon the highest amount outstanding during each period of twenty years. The amount of gain to the Government at the present time, arising from this source, is probably about four millions of dollars. This gain does not properly belong to the United States, or to the banks issuing the notes. It really belongs to those parties only who were the owners of such circulating notes at the time of their loss or destruction. The Government of the United States receives the circulating notes of the national banks in payment of all dues except duties on imports, and guarantees the payment of their issues at the Treasury, on demand, holding a paramount lien upon all the assets of each bank to make good any deficiency which may arise after the sale of the bonds pledged for such notes.

The amount of the gain accruing from the non-redemption of lost national-bank notes can soon be approximately estimated, and should be authorized to be carried to the credit of an "insolvent-bank redemption" account in the office of the Treasurer. If this fund should be used for the purpose of redeeming the notes of insolvent national banks, the avails of whose bonds might be insufficient for that purpose, the issue could safely be increased to a rate not exceeding the lowest market value of the bonds during the calendar or fiscal year previous to the deposit. Experience has shown that if instead of ninety dollars upon each one hundred dollars of bonds, one hundred dollars of circulating notes had been issued upon every seventy dollars of United States bonds deposited, there would not have been any loss to the Government, or to the holders of the circulating notes of any of the national banks which have failed during the last twenty years; but that there might have been an additional loss to the depositors, depending upon the character of the assets held in place of the portion of bonds which on this supposition would have been released. If circulation had been issued to these insolvent banks, which had a capital of about twenty millions, to the amount of their capital, the value of the bonds being the same, and there had been just previous to failure a decline in the market of 5 per cent. upon the value of the bonds, the losses would not have exceeded one million of dollars. These possible losses would have fallen upon the holders of the notes of such few banks only as became insolvent, or upon the creditors of these banks or the Government; and if the gain arising from lost notes could have been used as proposed, these possible losses would have been provided for. A very large proportion of the national banks are strong in assets and in the wealth of their shareholders, and no losses can arise either to creditors or note holders from their issues. Circulation could, in fact, be safely issued to many of the national banks, which have an accumulated surplus of more than 20 per cent. of their capital to an amount exceeding their capital or bonds deposited. But the present system is a free banking system, under which any association of persons may organize a bank. The increase in the wealth of the country has been rapid, and associations are being rapidly organized in such localities as offer good business inducements, by persons of undoubted means and good financial standing; but human *nature remains the* same, and Congress would

not be justified, under the present system, in authorizing the issue of circulation beyond the amount of security deposited, as such legislation would offer inducements to unprincipled men to organize banks, and issue circulation for fraudulent purposes.

A proper limit to the issue of the circulating notes of each bank, and adequate security for the amount to be issued, does more to prevent the organization of fraudulent institutions, in such a broad territory as our own, than any penal provision however stringent.

Legislation authorizing such an account as has been suggested to be opened in the office of the Treasurer would insure the Government against any possible loss, and the increase of circulation upon bonds, together with the repeal of the tax upon circulation, would undoubtedly have the effect of supplying the country with bank circulation for the next twenty-four years, or until the maturity of the four per cent. bonds, and probably without affecting the safety fund thus provided to the amount of a single dollar. This legislation would have the effect to advance the price of the bonds, but the advance would bring them into the market, still leaving a sufficient profit to make the investment desirable as a pledge for circulation.

If beyond any anticipated contingency the bonds should largely decline in value, the amount of security could immediately be required to be increased, under section 5167 of the Revised Statutes, which provides that—

> Whenever the market or cash value of any bonds thus deposited with the Treasurer is reduced below the amount of the circulation issued for the same, the Comptroller may demand and receive the amount of such depreciation in other United States bonds at cash value or in money from the association, to be deposited with the Treasurer, as long as such depreciation continues.

If considered desirable, in anticipation of a gradual decline of premium, the proposed law could require the amount of circulation issued to be reduced one per cent. yearly, or such per centum that the total amount outstanding could not at any time exceed the value of the bonds on deposit, and the Treasurer also could be authorized to retain the interest upon bonds when necessary upon the request of the Comptroller.

The proposition to convert the long bonds into threes, is more desirable than the proposition to increase the rate of circulation, for the reason already referred to, that the new three per cents, payable in 1891 and 1907, would bear but a comparatively small premium in the market and that the Government would be enabled to use its surplus revenues to advantage. They would be the only bonds available for circulation, and would not be likely to be withdrawn for sale for the purpose of realizing the market price; and the profit on circulation would be sufficient to induce banks to deposit them whenever additional circulation is required.

From time to time, as the present three per cents are called for payment, the fours and four and a halfs are likely to advance in the market, and subsequently to decline gradually until the day of payment. There will be a diversity of opinion in reference to the date when they will reach their maximum price in the market, and for that reason they will be deposited and withdrawn, not when a greater or less amount of circulation is needed, but when the holder believes that he can realize the greatest profit from their purchase or sale. The new long three per cents would give that elasticity to the circulation which is greatly needed, and which cannot be obtained from the deposit of Government securities worth a premium nearly equal to one-fourth of their par value.

While the Comptroller is of opinion that the addition to the circulating medium of the country during the last three years has been more

than sufficient to supply the legitimate demands of business, he believes that the large contraction of the currency now imminent, should not be allowed to take place too rapidly, or the deficiency caused by such contraction be replaced by a substitute less desirable than the bank notes now in circulation. It is said that if the deficiency arising from the retirement of national-bank notes during the next three years should amount to about 60 millions per annum, it may be supplied by the gold imported from abroad, by the annual product from the mines, or by the coinage of the silver dollar upon which silver certificates are now issued.

By reference to the next chapter of this report it will be seen that there has been a large increase in gold coin, and also a large and steady increase in the amount of silver, chiefly of standard silver dollars, since the date of resumption.

But in the fiscal years from 1868 to 1877 there was an excess of gold exports as follows:

1868	$63,658,901	1873	$36,174,268
1869	21,870,930	1874	14,539,282
1870	21,579,012	1875	53,284,184
1871	59,802,647	1876	23,184,341
1872	40,831,302	1877	344,140

while during the succeeding fiscal years there was an excess of gold imports, as follows:

1878	$4,125,760	1881	$97,466,127
1879	1,037,334	1882	1,789,174
1880	77,119,371	1883	6,133,261

The gold production from the mines is estimated to have been about 32 millions annually during the last six years, from which must be deducted about 11 millions, the amount estimated to have been used annually in the manufactures and arts.

The annual increase or decrease of gold in this country is subject to great variations, depending largely upon the value of its products exported and the amount of its imports. It may at any time be largely to the advantage of trade and the business of the country to send gold abroad for the purchase of commodities, and if the experience of former years, not only in this country but elsewhere, is repeated, the amount of gold now held by us will not long hence be greatly diminished. Under existing laws, the increase in standard silver dollars cannot be less than 27 millions annually, and to that extent the contraction caused by the withdrawal of the bank circulation may be supplied by the introduction of an inferior currency.

It is also urged that Treasury notes as well as silver certificates may be issued in place of the bank notes which are to be retired.

This latter proposition was fully discussed in the reports of the Comptroller previous to the resumption of specie payment on January 1, 1879. It has been discussed in nearly every village and city of the Union, at a time when a large amount of five and six per cent. bonds was payable at the pleasure of the Government, and when the receipts of the Government did not so largely exceed its expenditures. Even under such favorable circumstances the constitutional right to issue legal tenders in time of peace was questioned; and it may be added that this question is now before the Supreme Court of the United States for its determination. If Treasury notes not a legal tender were to be issued for the amount of the present paper circulation, in all about 700 millions, the Government, as was then said, must hold a large amount—not less than 250 millions—of coin as a reserve, a considerable portion of which must be purchased; and the interest upon this reserve and the expense of issuing the notes and the cost of redemption were then considered more than *equal to the advantage* or profit derived by the

banks from the issue of circulating notes, while the obvious advantages of the present systemof paper currency, composed of bank and Treasury notes in nearly equal proportions, and of having the monetary institutions of the country large holders of the public debt, would be lost.

The most serious objection to the proposition was that if the entire paper money of the country was issued by the Government, its amount would depend, not upon the demands of business, but upon the action of political parties and of Congress, and could be increased and diminished at its pleasure. No country which has continuously maintained specie payment has burdened itself with direct issues of paper circulation. Such issues in England and France are not the issues of the country, but the demand promissory notes of great banking institutions organized for this purpose. The act to provide for the redemption of specie payments, of January 14, 1875, provided for the reduction of the legal-tender Treasury notes, and the act of May 31, 1878, fixed the limit of such notes, leaving a conviction in the minds of the people that the amount was not to be increased. If the amount is to be increased, it cannot be done without reopening again the discussions which took place previous to resumption, and which finally resulted in the passage of the act extending the corporate existence of the national banks during the last session of Congress. If reopened it is more likely to result, as has been said by the Comptroller in previous reports, in the repeal of the act taxing the notes of State banks out of existence than in any considerable increase of Treasury notes.

Since the date of the commencement of this exhaustive discussion in every part of the country, its situation has greatly changed. Specie payments have been resumed, and the revenue of the Government has so greatly increased that the funded debt has been diminished more than four hundred millions, and the borrowing power of the Government increased from 5 per cent. to about 2.80 per cent. More than 1,700 millions of five and six per cent. bonds have been replaced by fours and four-and-a-halfs, and the remainder converted into three-and-a-halfs; while during the last two years five hundred and seventy millions of the three and one-half per cents have either been refunded, converted into threes, or paid, or called for payment, and the Treasury is embarrassed, not for want of the funds with which to pay the expenses of the Government, but with a revenue greater than it needs, and greater than it can judiciously disburse. Under such circumstances, authority of Congress to print additional Treasury notes would lead to still greater embarrassment, and place in the Treasury circulating notes at a time when the most important subject before Congress is the reduction of a redundant revenue and the employment of the surplus of an overflowing Treasury. If it were possible to issue additional Treasury notes when the revenues of the Government are so much greater than its expenditures, and simultaneously with the yearly addition of silver dollars now authorized by law, it is evident that such steps would lead plainly from a gold to a silver standard. The gold balance belonging to the Treasury is large, but the silver balance has increased rapidly, and the laws now in force will continue to increase the silver and reduce the gold.

The issue of additional Treasury notes will weaken the Treasury, and be likely to create doubts on the part of some of the holders as to the ability of the Government to pay gold on demand, and the Government, by declining to pay in gold, thus taking from the holder the option of payment, may at any time bring the nation upon the silver standard, advancing the price of products and demonetizing the entire gold coin

of the country. In such a crisis, the reserve of gold in the Treasury will be continually diminished on the one hand by the presentation of its notes for payment, while its revenue, on the other hand, will not be increased by customs duties paid in gold, as at present, but by the return of silver dollars and silver certificates, which will under existing laws sooner or later drive every dollar of gold coin out of circulation, bringing upon the country a much greater contraction than that which it is now proposed to prevent.

DISTRIBUTION OF COIN AND PAPER CURRENCY.

In previous reports tables have been given showing the amount of coin and currency in the country and its distribution in the Treasury, in the banks, and among the people on January 1, 1879, the date of the resumption of specie payments, and on November 1 of that and each succeeding year. These tables have been thoroughly revised, and are again presented, the amounts on November 1, 1879, being omitted, while those on November 1, 1883, are added.

The amounts of gold and silver in the country available for circulation are based upon the estimates of the Director of the Mint for January 1, 1879, and November 1, 1879. The amounts of gold for the succeeding dates have been obtained by adding the gold production of the country, less the amounts used in the arts, from estimates of the same officer, adding the excess of gold importations during the year or deducting the excess of gold exportations for the same period, according to the reports of the Bureau of Statistics. The amounts of silver are obtained by adding for each year the amount of silver dollars and fractional coinage, less amounts recoined. For the year 1883 the silver bullion purchased by the Government for coinage and on hand on November 1 is included.

From November 1, 1882, to November 1, 1883, the production of gold by the mines of the United States is estimated to have been $32,000,000. During the same period the amount of gold—foreign and domestic gold coin and bullion—imported in excess of the amount exported has been $13,613,992, making an increase in the stock of gold in the country of $45,613,992. From this amount must be deducted the amount used in the arts during the same period ($11,000,000), leaving $34,613,992 as the increase in the stock of gold coin and bullion in the country.

The total excess of imports of gold over exports of the same from the date of resumption to November 1, 1883, has been $186,195,510, and the total estimated gold product of the mines of the United States for the same period has been about $167,600,000. The total amount of silver coined during the year has been, after deducting the recoinage, $29,021,143, of which $28,391,069 were standard silver dollars. The total amount of the latter coined since the passage of the act of February 28, 1878, authorizing that coinage, up to November 1, 1883, has been $156,720,949.

The following table, based upon the estimates and figures given above, shows the amount of coin and currency in the country on January 1, 1879, and on November 1 of the years named:

	January 1 1879.	November 1, 1880.	November 1, 1881.	November 1, 1882.	November 1, 1883.
Gold coin and bullion	$278, 310, 126	$449, 327, 404	$550, 922, 398	$547, 356, 262	$581, 970, 254
Silver coin	106, 573, 803	153, 653, 630	181, 476, 144	208, 744, 424	242, 701, 932
Legal-tender notes	346, 681, 016	336, 681, 016	346, 681, 016	346, 681, 016	346, 681, 016
National-bank notes	323, 791, 674	343, 834, 107	360, 344, 250	362, 727, 747	352, 013, 787
Totals	1, 055, 356, 619	1, 293, 496, 157	1, 439, 423, 808	1, 465, 509, 449	1, 523, 366, 989

There has been no change in the aggregate of legal-tender notes outstanding, which still remains as fixed by the act of May 31, 1878. National-bank notes have decreased $10,713,960 during the year; the amounts of gold and silver have increased $34,613,992 and $33,957,508, respectively, making the total increase during the year in gold, silver, and currency, $57,857,540.

The table below gives the portion of the gold, silver, and currency held by the United States Treasury and by the national and State banks. The amounts in the United States Treasury are for the corresponding dates with those in the preceding table. The amounts in the national banks are for the corresponding dates nearest thereto on which returns were made to the Comptroller, viz: January 1, 1879; October 1, 1880 and 1881; October 3, 1882, and October 2, 1883. The amounts in the State banks, trust companies, and savings banks have been compiled in this office from official reports for the nearest obtainable dates.

	January 1, 1879.	November 1, 1880.	November 1, 1881.	November 1, 1882.	November 1, 1883.
GOLD.					
In the Treasury, less certificates	$112,703,342	$133,679,349	$167,781,909	$148,435,473	$157,353,760
In national banks, including certificates	35,039,201	102,851,032	107,222,169	94,127,324	97,570,057
In State banks, including certificates	10,937,812	17,102,130	19,901,491	17,892,500	18,255,300
Total gold	158,680,355	253,632,511	294,905,569	260,455,297	273,179,117
SILVER.					
In the Treasury, standard silver dollars	17,249,740	47,156,588	66,576,378	92,414,977	116,036,450
In the Treasury, bullion	9,121,417	6,185,000	3,424,575	4,012,503	4,936,365
In the Treasury, fractional coin	6,048,194	24,635,501	25,984,687	26,749,482	26,712,424
In national banks	6,460,557	6,495,497	7,112,567	8,234,739	10,247,926
Total silver	38,879,908	84,472,626	103,098,207	131,411,701	157,933,165
CURRENCY.					
In the Treasury, less certificates	44,425,655	18,221,826	22,774,830	26,224,248	30,990,217
In national banks, including certificates	126,491,720	86,439,925	77,630,917	92,544,767	103,316,809
In State banks, including certificates	25,944,485	25,828,794	27,391,317	27,086,482	28,259,069
In savings banks	14,513,779	17,072,680	11,782,243	14,724,978	12,998,594
Total currency	211,375,639	147,563,225	139,579,307	160,580,475	175,570,682
Grand totals	408,935,902	485,668,362	537,583,083	552,447,473	606,682,964

If the aggregates of gold, silver, and currency for the several dates in the above table be deducted from the amounts of the same items at corresponding dates in the table which precedes it, the remainders will be, approximately, the amounts in the hands of the people at corresponding dates.

	January 1, 1879.	November 1, 1880.	November 1, 1881.	November 1, 1882.	November 1, 1883.
Gold	$119,629,771	$195,694,893	$256,016,829	$286,900,965	$308,791,137
Silver	67,693,895	69,181,004	78,377,937	77,332,723	84,768,767
Currency	459,097,051	542,951,898	567,445,959	548,828,288	523,124,121
Totals	646,420,717	807,827,795	901,840,725	913,061,976	916,684,025

The gold in the Treasury, including bullion in the process of coinage, has increased during the year $8,918,287, and in the banks $3,805,533. The paper currency in the Treasury has increased $4,771,969, and in the banks $10,218,238. The increase of gold outside of the Treasury and the banks has been $21,890,172, and of silver coin $7,436,044, and the decrease of paper currency exclusive of silver certificates, $25,704,167. In the foregoing tables the silver certificates issued by the Treasury have not been included, but the standard silver dollars held for their redemption on presentation form a portion of the silver coin in the Treasury. The silver certificates in the hands of the people and the banks, at the dates corresponding to those given in the tables, were as follows:

January 1, 1879	$413,360
November 1, 1880	19,780,240
November 1, 1881	58,838,770
November 1, 1882	65,620,450
November 1, 1883	85,334,381

It will be seen that the amount of these certificates in circulation has increased $19,713,931 during the year.

The gold certificates issued under section 12 of the act of July 12, 1882, outstanding in the hands of the people and banks on November 1, 1882, and November 1, 1883, not including the amount in the Treasury, were $6,962,280 and $48,869,940, respectively.

As before stated, the total amount of standard silver dollars coined up to November 1, 1883, was $156,720,949; of which, as shown in one of the foregoing tables, $116,036,450 was then in the Treasury, although an amount equal to $85,334,381 was represented by certificates in the hands of the people and the banks, leaving $30,702,069 then held by the Treasury. Of the $156,720,949 coined, $40,684,499 was therefore evidently outside of the Treasury, and $85,334,381 of the amount in the Treasury was represented by certificates in circulation. The remainder of the silver, $85,980,983, consisted of subsidiary coin, trade dollars, and bullion purchased for coinage, of which $31,648,789 was in the Treasury, and about $49,993,256 was in use with the people and the banks, in the place of the paper fractional currency for which it was substituted, as against $53,232,520 similarly employed November 1, 1882.

The increase of gold and silver coin and paper currency, exclusive of silver certificates outside of the Treasury and the banks since the date of resumption, is thus estimated to have been $270,263,338, and the increase during the year ending November 1, 1883, $3,622,049. To these sums the amounts of silver certificates in the hands of the people may be added. On November 1, 1883, the amount of these certificates held by the people and the banks was, as has been seen, $85,334,381; but the proportion of this amount in the hands of the people cannot be exactly determined.

AMOUNT OF INTEREST-BEARING FUNDED DEBT IN THE UNITED STATES, AND THE AMOUNT HELD BY NATIONAL BANKS.

The public debt reached its maximum on August 31, 1865, at which time it amounted to $2,845,907,626. More than 1,275 millions of this debt were in temporary obligations of the Government, of which 830 millions bore interest at 7.30 per cent. per annum. The average rate of interest on 1,725 millions of the debt at that date was 6.62 per cent. This large amount of temporary obligations was funded within the three years which followed the close of the war, chiefly into six per cent. bonds. The six per cent. bonds were gradually reduced during the year 1869 and the seven years *following, by payment* and refunding into five

per cents. The six per cents, together with the five per cents, were subsequently rapidly replaced by four and one-half and four per cent. bonds, which were authorized to be issued by the act of July 14, 1870. In the year 1881 all of the unredeemed five and six per cent. bonds, amounting to $579,560,050, were continued payable at the pleasure of the Government, with interest at three and one-half per cent., by agreement with the holders. The act of July 12, 1882, authorized the refunding of the three and one-halfs into three per cents, and since its passage all of these bonds have been converted into three per cents, or called for payment. The last call was made on July 26 for $30,753,350, and the interest on these bonds ceased on November 1 last. The Secretary also, during the months of September, October, and November, called for payment forty millions of the threes. The interest on the last call of ten millions is to cease on February 1.

The report for 1879 and subsequent reports contain tables exhibiting the classification of the unmatured interest-bearing bonded debt of the United States, and of the bonds held by the national banks for a series of years.

These tables are again presented, and exhibit the amount of the outstanding bonds of the Government, and the amount held by the banks on July and November 1, of the present year.

The following table exhibits the classification of the unmatured interest-bearing bonded debt of the United States* at the dates named:

Date.	Six per cent. bonds.	Five per cent. bonds.	Four and a half per cent. bonds.	Four per cent. bonds.	Total.
Aug. 31, 1865	$908,518,091	$199,792,100			$1,108,310,191
July 1, 1866	1,008,388,469	198,528,435			1,206,916,904
July 1, 1867	1,421,110,719	198,533,435			1,619,644,154
July 1, 1868	1,841,521,800	221,588,400			2,063,110,200
July 1, 1869	1,886,341,300	221,589,300			2,107,930,600
July 1, 1870	1,764,932,300	221,589,300			1,986,521,600
July 1, 1871	1,613,897,300	274,236,450			1,888,133,750
July 1, 1872	1,374,883,800	414,567,300			1,789,451,100
July 1, 1873	1,281,238,650	414,567,300			1,695,805,950
July 1, 1874	1,213,624,700	510,628,050			1,724,252,750
July 1, 1875	1,100,865,550	607,132,750			1,707,998,300
July 1, 1876	984,999,650	711,685,800			1,696,685,450
July 1, 1877	854,621,850	703,266,650	$140,000,000		1,696,888,500
July 1, 1878	738,619,000	703,266,650	240,000,000	$98,850,000	1,780,735,650
July 1, 1879	310,932,500	646,905,500	250,000,000	679,878,110	1,887,716,110
July 1, 1880	235,780,400	484,864,900	250,000,000	739,347,800	1,709,993,100
July 1, 1881	196,378,600	439,841,350	250,000,000	739,347,800	1,625,567,750
	Continued at 3½ per cent.	Continued at 3½ per cent.			
	58,957,150	401,503,900	250,000,000	739,349,350	1,449,810,400
July 1, 1882		32,082,600			
July 1, 1883		3 per cents. 304,204,350	250,000,000	737,942,200	1,324,229,150
Nov. 1, 1883		3 per cents. 305,529,000	250,000,000	737,946,550	1,273,475,450

The operations of the Treasury Department for a series of years have largely reduced the amount of interest receivable by the national banks on the bonds held by them. During the last year, the three and one-half per cents were reduced more than two hundred millions ($200,769,200), and during the present year ending November 1 more than forty millions ($40,606,950) have been called and have been chiefly replaced by three per cents.

*The Navy pension fund, amounting to $14,000,000 in three per cents, the interest upon which is applied to the payment of naval pensions exclusively, and $14,970,500 of 3½ per cents., which had been called and ceased to bear interest after November 1, are not included in the table.

Sixteen years ago the banks had on deposit as security for circulation 327 millions in United States bonds, of which amount 241 millions bore interest at six per cent. and 86 millions at five per cent., and on July 1, 1882, they held 227 millions of three and one-half per cent. bonds. These bonds have now entirely disappeared from the list of securities held by the national banks with the exception of $632,000, which have been called. The average rate of interest now paid by the United States on the bonds deposited as security for circulating notes is about three and one-half per cent. upon their par value; but is equal to about 3.19 per cent. only of the current market value of the bonds. The banks now hold 41 millions of four and one-halfs; 106 millions of fours; and 201 millions of three per cents, which have been refunded from three and one-half per cents. This will be seen from the following table, which exhibits the amount and classes of United States bonds owned by the banks, including those pledged as security for circulation and for public deposits on the first day of July in each year since 1865, and upon November 1 of the present year.

Date.	United States bonds held as security for circulation.					United States bonds held for other purposes at nearest date.	Grand total.
	6 per cent. bonds.	5 per cent. bonds.	4½ per cent. bonds.	4 per cent. bonds.	Total.		
July 1, 1865	$170,382,500	$65,576,600	.....	.....	$235,959,100	$155,785,750	$391,744,850
July 1, 1866	241,083,500	86,226,850	.....	.....	327,310,350	121,152,950	448,463,300
July 1, 1867	251,430,400	89,177,100	.....	.....	340,607,500	84,002,650	424,610,150
July 1, 1868	250,726,950	90,768,950	.....	.....	341,495,900	80,922,500	422,418,400
July 1, 1869	255,190,350	87,661,250	.....	.....	342,851,600	55,102,000	397,953,600
July 1, 1870	247,355,350	94,923,200	.....	.....	342,278,550	43,980,600	386,259,150
July 1, 1871	220,497,750	139,387,800	.....	.....	359,885,550	39,450,800	399,336,350
July 1, 1872	173,251,450	207,189,250	.....	.....	380,440,700	31,868,200	412,308,900
July 1, 1873	160,923,500	229,487,050	.....	.....	390,410,550	25,724,400	416,134,150
July 1, 1874	154,370,700	236,800,500	.....	.....	391,171,200	25,347,100	416,518,300
July 1, 1875	136,955,100	239,359,400	.....	.....	376,314,500	26,900,200	403,214,700
July 1, 1876	109,313,450	232,081,300	.....	.....	341,394,750	45,170,300	386,565,050
July 1, 1877	87,690,300	206,651,050	$44,372,250	.....	338,713,600	47,315,050	386,028,650
July 1, 1878	82,421,200	199,514,550	48,448,650	$19,162,000	349,546,400	68,850,900	418,397,300
July 1, 1879	56,042,800	144,616,300	35,056,550	118,538,950	354,254,600	76,603,520	430,858,120
July 1, 1880	58,056,150	139,758,650	37,760,950	126,076,300	361,652,050	42,831,300	404,483,350
July 1, 1881	61,901,800	172,348,350	32,600,500	93,637,700	360,488,400	63,849,950	424,338,350
	Continued at 3½ per cent.:	Continued at 3½ per cent.:					
July 1, 1882	25,142,600	202,487,650	32,752,650	97,429,800	357,812,700	43,122,550	400,935,250
		7,402,800					
July 1, 1883	385,700	3 per cents. 200,877,850	39,408,500	104,954,650	353,029,500	34,094,150	387,123,650
Nov. 1, 1883	.....	3 per cents. 201,327,750	41,319,700	106,164,850	348,812,309	30,674,050	379,486,350

The banks also held $3,463,000 of Pacific Railroad six per cents. They also had $632,000 three-and-a-halfs, which ceased to bear interest on November 1.

More than one-half of the bonds now held by the national banks are three per cents. If the public debt continues to be paid as rapidly as it has been during the past year, all of these bonds will certainly be called within the next three years. Those of the lower numbers which it is safe to estimate will not be called within the next two years, cannot be purchased for a premium of much less than two per cent., and at that price there will be a loss upon circulation based on this class of bonds if they are redeemed within three years. The profits on circulation based on other bonds held by national banks are merely nominal.

AMOUNT OF UNITED STATES BONDS HELD BY THE NATIONAL BANKS, AND BY BANKS ORGANIZED UNDER STATE LAWS, AND BY PRIVATE BANKERS.

Through the courtesy of State officers, the Comptroller has obtained official reports made to them under State laws by State banks in 22 States, by trust companies in 5 States, and by savings banks in 14 States, at different dates during the year 1883, and from these returns the following table has been compiled:

Held by 754 State banks in twenty-two States	$5,287,606
Held by 34 trust companies in five States	17,437,990
Held by 630 savings banks in fourteen States	219,017,313
Total	241,742,909

The interest-bearing funded debt of the United States was, on November 1, last, $1,273,475,450. The total amount of bonds held by the national ($379,486,350) and State and savings banks ($241,742,909) was $621,229,259, which is not greatly less than one-half of the interest-bearing debt. The amount of United States bonds held by State banks is given by geographical divisions for the years 1880, 1881, 1882, 1883, as follows:

Geographical divisions.	1880.	1881.	1882.	1883.
Eastern States	$45,230,098	$40,468,340	$42,667,248	$37,399,819
Middle States	157,563,757	176,373,889	197,135,239	182,847,588
Southern States	958,470	1,073,460	268,350	646,500
Western States	2,672,242	5,735,518	3,369,414	3,105,024
Pacific States	7,240,835	14,874,332	20,020,175	17,743,978
Total	213,665,402	238,525,539	263,460,426	241,742,909

In previous reports the Comptroller has given the amount of United States bonds held by banks organized under State laws, and by private bankers, as returned to the Commissioner of Internal Revenue for purposes of taxation. The tax on deposit and capital having been repealed, no further returns of this kind will be available hereafter. The last returns to the Commissioner were for the six months ending November 30, 1882, and from these returns the following table has been compiled for the purpose of comparison with previous tables presented since the year 1880:.

Geographical divisions.	Amount invested in United States bonds.		
	By State banks, private bankers, and trust companies.	By savings banks.	Total.
May 31, 1880:			
New England States	$3,737,093	$37,693,200	$41,430,293
Middle States	20,564,834	146,301,155	166,865,989
Southern States	2,541,991	1,000	2,542,991
Western States	8,137,554	2,474,557	10,612,111
Pacific States and Territories	3,883,816	2,717,904	6,601,720
United States	38,865,288	189,187,816	228,053,104
May 31, 1881:			
New England States	2,985,496	36,640,795	39,626,291
Middle States	21,908,703	168,617,049	190,525,752
Southern States	1,707,702	21,689	1,729,391
Western States	6,734,948	2,689,447	9,424,395
Pacific States and Territories	4,984,313	6,911,198	11,895,511
United States	38,321,162	214,880,178	253,201,340

Geographical divisions.	Amount invested in United States bonds.		
	By State banks, private bankers, and trust companies.	By savings banks.	Total.
May 31, 1882:			
New England States	$2,644,895	$37,046,625	$39,691,520
Middle States	20,576,823	189,775,842	210,352,665
Southern States	1,862,946		1,862,946
Western States	7,099,874	2,354,710	9,454,584
Pacific States and Territories	5,897,637	12,851,605	18,749,242
United States	38,082,175	242,028,782	280,110,957
November 30, 1882:			
New England States	2,501,497	34,274,199	36,775,696
Middle States	19,735,340	179,131,959	198,867,299
Southern States	1,147,881		1,147,881
Western States	6,528,666	2,143,118	8,671,784
Pacific States and Territories	5,781,749	14,380,007	20,161,756
United States	35,695,133	229,929,283	265,624,416

The data, which has heretofore been obtained from the Commissioner of Internal Revenue, included the returns from private bankers, and was, therefore, more complete than that obtained from the reports of State officers, but the amounts held by State and savings banks have not greatly differed.

ILLEGAL CERTIFICATON OF CHECKS.

Section 13 of the act of July 12, 1882, provides:

That any officer, clerk, or agent of any national-banking association who shall willfully violate the provisions of an act entitled "An act in reference to certifying checks by national banks," approved March third, eighteen hundred and sixty-nine, being section fifty-two hundred and eight of the Revised Statutes of the United States, or who shall resort to any device, or receive any fictitious obligation, direct or collateral, in order to evade the provisions thereof, or who shall certify checks before the amount thereof shall have been regularly entered to the credit of the dealer upon the books of the banking association, shall be deemed guilty of a misdemeanor, and shall, on conviction thereof in any circuit or district court of the United States, be fined not more than five thousand dollars, or shall be imprisoned not more than five years, or both, in the discretion of the court.

Upon the passage of this act those banks which were accustomed to certify large amounts of checks, accepted those checks which were drawn upon them, instead of certifying them, and assumed that such acceptance was not in violation of law. The banks claimed that they had power to accept checks after the 3d and 7th paragraphs of section 5136 of the United States Revised Statutes. The former authorizes national banks to "make contracts," and the latter provides for the "exercise of all such incidental powers as shall be necessary to carry on the business of banking."

The Comptroller being in doubt in reference to the proper construction of the section, the matter was referred to the Attorney-General, who rendered an opinion on November 24, 1882, (1) that a national bank cannot legally accept checks drawn upon it where the drawer has not already deposited therewith the amount stated in the check; and (2) that the limit imposed by section 5202 extends to liabilities incurred by the certification of checks, and that such acceptance by a bank, without the existence of funds on deposit therewith, to an amount exceeding in the aggregate the amount of its paid-in capital, would be a violation of that section.

The proposition for the establishment of a stock-clearing house, such as is in operation in London, Vienna, Berlin, and other large cities in Europe, was in the mean time brought forward and discussed. An organization was formed and the plan was twice placed in operation, and it is said by those who are well acquainted with such transactions to have been practicable. It was abandoned during the last few weeks, chiefly, it is said, through the fears of some of the banks and stock brokers that it would diminish the magnitude of their business. In the month of August it was rumored that the failure of a firm of brokers had resulted in a loss to the stockholders of the Wall Street National Bank by an over-certification or acceptance of checks, and an examination of this bank during the following month confirmed the rumor, and furnished evidence of an over-certification of the checks of this firm in excess of their balance of cash on hand to the amount of $199,899. The Comptroller thereupon, on September 27, addressed a letter to the Secretary, inclosing a certified copy of the examiner's report, with the request that he would transmit the same to the Attorney-General for his action, under section 13 of the act of July 12, 1882. This information was soon brought to the attention of the United States district attorney in the city of New York, the result of which was the indictment of the teller of the above bank, who, on being notified of that fact, appeared before the United States commissioner, and was held to bail to plead at the December term of the court. As soon as this proceeding became known to the bank it went into voluntary liquidation on October 17, and immediately thereafter was converted into a State bank, under the laws of the State of New York.

The trial, under this indictment, will test the law, which provides for a fine or imprisonment of any officer of a national bank who shall certify checks in violation of section 5208, United States Revised Statutes.

This proceeding should result in the organizatton of a stock-clearing house, or of some other action by the stock board and the banks, through whom this kind of business is transacted, which will render it unnecessary for national banks to certify brokers' checks, or lend their credit for such large amounts in the future.

It is respectfully submitted that the law, as it now stands, makes it a criminal offense for an officer of a bank to certify the check of a dealer who may inadvertently overdraw his account for a few dollars in the payment of an ordinary obligation; and it certainly should be amended so as to exempt such ordinary business transactions from the penalty imposed.

In this connection the Comptroller calls attention to the successful operation of the stock-clearing house in the city of London, which the London Economist says, "as a piece of time and labor saving mechanism, has undoubtedly achieved success."

The following paragraph from an article in that journal, of October 6, gives a history of the establishment of a stock clearing-house in that city, from which it appears that operations of equal magnitude with those in New York are successfully conducted, although the settlements it is understood are made fortnightly instead of daily, as in New York:

Since 1880, when the present clearing-house was established, the system has been considerably extended, and great efficiency has now been secured. The collapse of the preceding clearing, after a duration of about five years, was a perfectly natural ending to a system which was at once unscientific and contrary to the customs of the business. Under the old *régime*, all transactions between middlemen, which in the more speculative stocks are always very numerous, were simply eliminated for the purpose of bringing the original buyer and the ultimate seller into actual contact; but elimination, pure and simple, destroyed all continuity, so that two parties were brought unconsciously into a position of mutual contact. The leading principle of *the present system is* the complete practical recognition of the vital necessity of pre-

serving the same continuity which would exist if bargains were settled in the ordinary way, without the intervention of a clearing-house. As a consequence of this, the members of the stock exchange, as a whole, have from the beginning felt great confidence in the soundness of the work done by the clearing-house. The stock exchange committee accordingly supported the present system *ab initio*, whereas the former system was entirely unofficial. At present, it may be said that all the effectual members, with the exception of about one hundred broking firms—some of which, however, are of high standing—have become members of the clearing, and the number is even now steadily increasing. In fact, after a certain point of success has been attained, the tendency to participate becomes almost irresistible; hence it is anticipated that in the course of time clearing will become so universal that it will be considered advisable to make it compulsory. The scope of the clearing-house is now very extensive; only four stocks were first cleared, while now the number is nearly one hundred, which includes all the stocks in any way speculative. A great feature of the clearing is its mobility. A sudden rush of speculation into any stock, which in other times would have disorganized business, and perhaps have led to financial embarrassment, is now at once met by placing the stock upon the clearing list. The heavy work incidental to any important "special settlement" will now most likely be more and more lightened by the operations of the clearing-house, as atisfactory beginning having been made sometime ago, when the special settlement in Spanish four per cents occurred. One great development, the clearing of the cash differences at the fortnightly settlements, is still possible. We believe that the plan would be found perfectly practicable if the committee chose to elect its adoption. Were this to become an accomplished fact on some future day, the clearing-house would be actually what it is even now in name, "the settlement department," and such an extension of the system, rendering it complete in scope, would seem to be merely a question of time.

LOSSES ON UNREDEEMED BANK NOTES.

Section 5222 of the Revised Statutes requires that all national banks which go into voluntary liquidation, and all insolvent banks, shall deposit in the Treasury an amount of lawful money equal to the amount of their circulating notes outstanding. Thus it will be seen that no association can close up its affairs without first providing for the payment of all of its circulating notes. The amount deposited must remain in the Treasury until the last outstanding notes shall have been presented for payment. Section 6 of the act of July 12, 1882, provides that at the end of three years from the date of the extension of the corporate existence of each bank the association so extended shall deposit lawful money with the Treasurer sufficient to redeem the remainder of the circulation which was outstanding at the date of its extension. It also provides that any gain that may arise from the failure to present such circulating notes for redemption shall inure to the benefit of the United States, and that the new circulating notes to be issued in the place of the old shall bear such devises as shall make them readily distinguished from the circulating notes previously issued. In the Comptroller's report for 1875, he prepared a table from data obtained from a series of reports of the superintendent of the bank department of the State of New York, exhibiting the amount of notes which had been issued to banks organized in the State, and the amount remaining at the expiration of the six years' notice required to be given by the banks, before they were by law relieved from the obligations to redeem them. Returns were in this way obtained from 286 banks either incorporated or organized under the safety fund or the free banking system of the State of New York.

The maximum amount of circulation issued to them was $50,754,514, and the amount of unredeemed circulation at the date of the report named was $1,336,337, or 2.63 per cent. of the highest amount issued. The maximum amount of circulation issued to 30 State banks in the city of New York, which are still in operation either as national or State associations, was $7,763,010, while the amount remaining unredeemed in October, 1875, was $142,365, or only 1.83 per cent. of the highest amount issued. The *amount of circulation* issued to 240 State

banks in Wisconsin was $7,565,409, and the amount unredeemed is $134,747, the percentage of unredeemed notes being 1.78 only. The maximum issue to 210 State banks in the six New England States was $39,245,380, while the amount remaining unredeemed is but $792,767, the proportion of the latter to the former being 2.02 per cent. The returns from 332 State banks in New York, New Jersey, Delaware, and Maryland show their maximum circulation to have been $65,664,176, while the amount unredeemed is $1,707,428, and the percentage 2.60. The percentage of unredeemed notes of 25 State banks in Ohio, having a circulation of $2,196,381, was 2.79. The greatest amount of circulation issued to 707 State banks, in 12 States, was $114,671,346, the amount outstanding $2,696,282, and the proportion unredeemed 2.4 per cent.

It is probable that, under the national system of redemption, the proportion of national-bank notes which will ultimately be redeemed under the national banking system is much greater than that of the State bank notes under previous systems.

The highest amount of circulation issued to 15 national banks which failed previous to 1870 was $1,554,400, and the amount outstanding on November 1, 1883, was $9,289, and the percentage unredeemed 0.60 per cent. of the amount issued. These notes had had a circulation of from five to six years only, which accounts for the small amount remaining outstanding. The highest amount of circulation issued to eight national banks which failed previous to 1873 was $1,642,293, and the percentage outstanding was 1.47 per cent., and these notes had had a circulation of from four to nine years. This is shown in detail in the following table, giving the date of the organization of each bank, the circulation outstanding, and the percentage unredeemed in the years 1875, 1878, and 1883.

Name and location of bank.	Date of organization.	Circulation.		Percentage unredeemed.		
		Issued.	Outstanding November 1, 1883.	1875.	1878.	1883.
First National Bank of Attica, N. Y	Jan. 14, 1864	$44,000	$278 50	1.10	.79	.63
Venango National Bank of Franklin, Pa	May 20, 1865	85,000	311 50	.73	.52	.37
Merchants' National Bank of Washington, D. C	Dec. 14, 1864	180,000	906 00	1.28	.81	.50
First National Bank of Medina, N. Y	Feb. 3, 1864	40,000	258 25	1.17	.78	.65
Tennessee National Bank of Memphis, Tenn	June 5, 1865	90,000	446 25	.99	.68	.50
First National Bank of Selma, Ala	Aug. 24, 1865	85,000	488 25	1.19	.81	.57
First National Bank of New Orleans, La	Dec. 18, 1863	180,000	1,494 50	1.55	1.18	.83
National Unadilla Bank of Unadilla, N. Y	July 17, 1865	100,000	325 50	.94	.51	.33
Farmers and Citizens' National Bank of Brooklyn, N. Y	June 5, 1865	253,000	1,627 75	1.05	.85	.64
Croton National Bank of New York, N. Y	Sept. 9, 1865	180,000	519 25	.82	.49	.29
First National Bank of Bethel, Conn	May 15, 1865	26,300	210 50	1.97	1.14	.80
First National Bank of Keokuk, Iowa	Sept. 9, 1863	90,000	491 00	1.20	.75	.55
National Bank of Vicksburg, Miss	Feb. 14, 1865	25,500	116 25	1.88	.80	.46
First National Bank of Rockford, Ill	May 20, 1864	45,000	377 00	2.31	1.41	.84
First National Bank of Nevada, Austin, Nev	June 13, 1865	129,700	1,438 50	3.71	1.73	1.11
Totals and average percentage, 15 banks		1,554,400	9,289 00	1.39	.86	.60
Ocean National Bank of New York, N. Y	June 6, 1865	800,000	12,223 00	6.10	2.55	1.53
Union Square National Bank of New York, N. Y	Mar. 13, 1869	50,000	454 00	4.33	1.97	.91
Eighth National Bank of New York, N. Y	Apr. 16, 1864	243,393	3,586 00	5.43	2.41	1.47
Fourth National Bank of Philadelphia, Pa	Feb. 20, 1864	179,000	2,525 00	5.88	2.74	1.41
Waverly National Bank of Waverly, N. Y	May 29, 1865	71,000	1,451 00	6.93	3.20	2.04
First National Bank of Fort Smith, Ark	Feb. 6, 1866	45,000	635 00	6.20	2.61	1.41
Scandanavian National Bank of Chicago, Ill	May 7, 1872	135,000	1,114 00	11.52	2.87	.83
Wallkill National Bank of Middletown, N. Y	July 21, 1865	118,900	2,231 50	10.05	3.48	1.88
Totals and average percentage, 8 banks		1,642,293	24,219 50	6.70	2.66	1.47

The table below shows that the highest amount issued to 17 national banks which failed prior to 1876 was $3,219,241, which at the time of their failure had been in circulation of from four to eleven years. This table also gives the amount of circulation issued to 40 national banks which became insolvent prior to 1876. In both cases the percentages of the notes unredeemed to the total issued are shown for the years 1875, 1878, and 1883, as well as the actual amount outstanding on November 1, 1883.

Name and location of bank.	Date of organization.	Circulation.		Percentage unredeemed.		
		Issued.	Outstanding November 1, 1883.	1875.	1878.	1883.
Crescent City National Bank of New Orleans, La	Feb. 15, 1872	$450,000	$6,540 00	15.39	5.30	1.45
Atlantic National Bank of New York, N. Y.	July 1, 1865	100,000	1,835 50	11.02	3.56	1.84
First National Bank of Washington, D. C.	July 16, 1863	450,000	14,761 00	32.80	7.85	3.28
National Bank of the Commonwealth of New York, N. Y.	July 1, 1865	234,000	6,052 70	38.05	7.73	2.59
Merchants' National Bank of Petersburg, Va.	Sept. 1, 1865	360,000	12,075 00	49.15	11.88	3.35
First National Bank of Petersburg, Va.	July 1, 1865	179,200	6,830 00	53.05	11.65	3.81
First National Bank of Mansfield, Ohio	May 24, 1864	90,000	2,749 50	43.12	9.22	3.05
New Orleans National Banking Association of New Orleans, La	May 27, 1871	360,000	8,000 00	30.97	7792	2.22
First National Bank of Carlisle, Pa.	July 7, 1863	45,000	1,355 00	43.40	8.43	3.01
First National Bank of Anderson, Ind.	July 21, 1863	45,000	1,437 50	40.03	8.75	3.19
First National Bank of Topeka, Kans.	Aug. 23, 1866	90,000	2,918 00	54.17	9.99	3.24
First National Bank of Norfolk, Va.	Feb. 23, 1864	95,000	3,505 00	48.21	11.28	3.69
Gibson County National Bank of Princeton, Ind.	Nov. 30, 1872	43,800	1,305 00	73.77	17.64	2.98
First National Bank of Utah, Salt Lake City, Utah	Nov. 16, 1869	134,991	3,063 00	49.50	9.54	2.28
Cook County National Bank of Chicago, Ill.	July 8, 1871	315,900	8,892 00	58.88	12.44	2.81
First National Bank of Tiffin, Ohio	Mar. 16, 1865	68,850	2,946 00	65.07	12.85	4.28
Charlottesville National Bank of Charlottesville, Va	July 19, 1865	157,500	9,320 00	95.00	23.37	5.91
Totals and average percentage, 17 banks		3,219,241	93,585 20	41.81	9.76	2.91
Totals and average percentage, 40 banks		6,415,934	127,093 70	23.06	5.79	1.98

In the appendix will be found a table which gives similar information relative to 51 national banks, which were placed in liquidation prior to 1870, whose notes had been in circulation six years previous to those of the 75 banks in the above tables which failed previous to 1872. The largest circulation of these 51 banks outstanding was $5,846,740, and the amount unredeemed on November 1, 1883, $82,827, being 1.42 per cent. The appendix contains a further table giving similar information in regard to 165 national banks in liquidation which had a circulation of $18,587,365, of which $48,315 is still outstanding, a percentage of 2.36.

The issues of Treasury notes of the series of 1869 and 1874 have not been so largely reduced. The national-bank notes for years have done the work, while a considerable portion of the legal tender notes have been held for years in the vaults of the national banks as reserve. These legal tender notes held by the banks have recently been replaced by coin to a considerable extent, but the banks yet held on October 2 $80,642,997. When these are assorted a considerable amount of the three first issues will be returned for redemption.

The highest amount of the first issue of legal-tender notes outstanding at any one time was $449,479,222 on February 3, 1864. These notes

were first issued on April 2, 1862, and the issue ceased on April 19, 1869. The amount outstanding and the amount redeemed since November 1, 1882, are shown in the following table, from which it will be seen that the amount outstanding on November 1, 1883, was $11,473,855, being a percentage of 2.55 on the highest amount outstanding.

Date.	Outstanding.	Redeemed during the year.	Percentage unredeemed.
November 1, 1878	$18,312,584	.....	4.07
November 1, 1879	16,271,277	$2,041,307	3.62
November 1, 1880	14,947,895	1,323,382	3.33
November 1, 1881	13,833,300	1,114,595	3.08
November 1, 1882	12,518,833	1,314,467	2.79
November 1, 1883	11,473,853	1,044,980	2.55

The amount of demand Treasury notes payable in gold issued from July 17, 1861, to December 31, 1862, was $60,000,000, in denominations of five, ten, and twenty dollars; and the amount remaining outstanding on the 1st of November last was $58,800, the proportion unredeemed being a little less than one-tenth of 1 per cent.: $2,359,447 having been redeemed within the last two years.

NATIONAL-BANK FAILURES.

Two national banks have been placed in the hands of receivers during the year ending November 1, 1883, namely: The First National Bank of Union Mills, of Union City, Pa., with a capital of $50,000, on March 24, 1883, and the Vermont National Bank, of Saint Albans, Vt., with a capital of $200,000, on August 9, 1883. The affairs of seven national banks have been finally closed within the year. These banks, with the total dividend paid by each to their creditors, are as follows:

	Per cent.
The First National Bank of Norfolk, Va	57.50
The First National Bank of Bedford, Iowa	22.50
The Northumberland County National Bank of Shamokin, Pa	81.59
The First National Bank of Monticello, Ind	98.00
The Cook County National Bank of Chicago, Ill	14.941
The First National Bank of Mansfield, Ohio	57.50
The Lock Haven National Bank of Lock Haven, Pa	100.00

The report for last year gave a list of fifteen banks in the hands of receivers, which were completely liquidated, with the exception of litigation pending in the courts. Three of these have been closed during the year. The others, owing to the delay in reaching the cases, are still in the same condition, although, in some instances, there is a prospect of a speedy settlement. The banks now remaining in this condition, with the percentage of dividends already paid to their creditors, are as follows:

	Per cent.
The Charlottesville National Bank of Charlottesville, Va	62.00
The First National Bank of Anderson, Ind	25.00
The Venango National Bank of Franklin, Pa	15.00
The Atlantic National Bank of New York City	95.00
The Miner's National Bank of Georgetown, Colo	65.00
The City National Bank of Chicago, Ill	77.00
The First National Bank of Georgetown, Colo	22.50
The First National Bank of Dallas, Tex	37.00
The Central National Bank of Chicago, Ill	60.00
The People's National Bank of Helena, Mont	40.00
The First National Bank of Allentown, Pa	70.00
The First National Bank of Waynesburg, Pa	40.00
The German National Bank of Chicago, Ill	80.00

The affairs of the Cook County National Bank of Chicago, Ill., have been closed, by sale of its remaining assets, by the order of the United States circuit court for the northern district of Illinois, under the rule *nisi*. The National Bank of the State of Missouri has paid an additional interest dividend to its creditors, making a total paid of 100 per cent. of principal and 85 per cent. of the interest accrued since the appointment of the receiver.

The following banks in the hands of receivers have paid dividends during the past year, the total dividends up to November 1, 1883, being also given:

Scandinavian National Bank of Chicago, 10 per cent.; total, 50 per cent.
National Bank of the Commonwealth of New York City, final dividend to stockholders of 0.80 per cent.; total to stockholders, 35.80 per cent.
First National Bank of Norfolk, Va., final dividend, 8.50 per cent.; total, 57.50 per cent.
First National Bank of Bedford, Iowa, final dividend, 10 per cent.; total, 23.50 per cent.
Watkins National Bank of Watkins, N. Y., 13 per cent. to stockholders.
Northumberland County National Bank of Shamokin, Pa., final dividend, 6.59 per cent.; total, 81.59 per cent.
Second National Bank of Scranton, Pa., 20 per cent.; total, 95 per cent.
National Bank of State of Missouri, Saint Louis, 35 per cent. interest dividend; total, 85 per cent. interest dividend.
First National Bank of Monticello, Ind., final dividend, 68 per cent.; total, 98 per cent.
First National Bank of Butler, Pa., 10 per cent.; total, 70 per cent.
Mechanics' National Bank of Newark, N. J., 5 per cent.; total, 60 per cent.
First National Bank of Buffalo, N. Y., 8 per cent.; total, 33 per cent.
Pacific National Bank of Boston, Mass., 5 per cent.; total, 5 per cent.
The First National Bank of Union Mills, Union City, Pa., 20 per cent.; total, 20 per cent.
Lock Haven National Bank of Lock Haven, Pa.; total, 100 per cent.
Cook County National Bank of Chicago, 7.112 per cent.; total, 15.112 per cent.
First National Bank of Mansfield, Ohio, final dividend, 12.50 per cent.; total, 57.50 per cent.

Since the commencement of the national banking system 89 banks have been placed in the hands of receivers, and 460 banks have voluntarily closed their business, by the vote of shareholders owning two-thirds of their stock, under the provisions of sections 5220 and 5221 of the Revised Statutes of the United States. Of the banks in the hands of receivers, 7 had been previously placed in voluntary liquidation by their stockholders, but failing to pay their depositors receivers were afterwards appointed by the Comptroller to wind up their affairs. Of the 89 banks placed in the hands of receivers, 58 have been finally closed, leaving 31 still in process of settlement, 13 of which, as has been seen, are awaiting the results of pending litigation, leaving about twenty receiverships only in active operation.

The loss to creditors of national banks which have been placed in the hands of receivers during the twenty years that have elapsed since the passage of the act of February 25, 1863, as near as can be estimated, including dividends which will probably be hereafter paid, has been about $7,000,000. The annual average loss has been, therefore, about $400,000 in the business of corporations having an average capital of about $450,000,000, and which have been responsible for the safe keeping of deposits in their hands, averaging constantly over $800,000,000, or about one-twentieth of 1 per cent. of annual loss to depositors.

During the year suit has been commenced against the directors of the First National Bank of Buffalo for negligent discharge of their duties, through which the losses resulting in the failure of the bank were incurred. A similar suit will soon be brought against the directors of the Pacific National Bank of Boston, Mass.

The total amount paid to creditors of insolvent national banks amounts to $21,778,672, upon proved claims, amounting to $31,136,208. The dividends so far paid thus equal about 70 per cent. of the proved claims. The amount paid during the year was $833,582.60.

Assessments amounting to $8,151,750 have been made upon the stockholders of insolvent national banks for the purpose of enforcing their individual liability under section 5151 of the Revised Statutes, of which $3,351,279 has been collected, and $151,279 during the past year.

A table showing the national banks which have been placed in the hands of receivers, the amount of their capital, of claims proved, the rates of dividends paid, and also showing the amount of circulation of such banks issued, redeemed, and outstanding, will be found in the appendix.

LOANS AND RATES OF INTEREST.

The following table gives the classification of the loans of the banks in the city of New York, in Boston, Philadelphia, and Baltimore, and in the other reserve cities, at corresponding dates in each of the last three years:

OCTOBER 1, 1881.

Classification.	New York City.	Boston, Philadelphia, and Baltimore.	Other reserve cities.	Country banks.	Aggregate.
	48 banks.	102 banks.	87 banks.	1,895 banks.	2,132 banks.
On U. S. bonds on demand	$2, 539, 928	$415, 164	$468, 496	$2, 661, 256	$6, 084, 844
On other stocks, bonds, &c., on demand	97, 249, 162	39, 251, 526	24, 227, 158	35, 423, 896	196, 151, 742
On single-name paper without other security	26, 935, 878	34, 465, 661	12, 904, 338	73, 114, 405	147, 420, 282
All other loans	120, 032, 691	137, 682, 302	96, 806, 506	464, 843, 937	819, 365, 436
Totals	246, 757, 659	211, 814, 653	134, 406, 498	576, 043, 494	1, 169, 022, 304

OCTOBER 3, 1882.

Classification.	50 banks.	102 banks.	91 banks.	2,026 banks.	2,269 banks.
On U. S. bonds on demand	$1, 618, 687	$265, 357	$1, 532, 214	$1, 851, 550	$5, 267, 808
On other stocks, bonds, &c., on demand	89, 532, 760	31, 653, 098	22, 143, 725	39, 554, 649	182, 884, 232
On single-name paper without other security	21, 382, 572	26, 721, 688	16, 075, 330	83, 576, 480	147, 754, 806
All other loans	126, 507, 873	143, 297, 359	106, 531, 193	526, 041, 981	902, 379, 670
Totals	239, 041, 892	201, 937 502	146, 282, 462	651, 024, 660	1, 238, 286, 516

OCTOBER 2, 1883.

Classification.	48 banks.	103 banks.	97 banks.	2,253 banks.	2,501 banks.
On U. S. bonds on demand	$2, 093, 526	$344, 337	$623, 679	$1, 972, 232	$5, 033, 774
On other stocks, bonds, &c., on demand	94, 321, 605	20, 638, 276	23, 099, 682	41, 518, 741	188, 578, 304
On single-name paper without other security	19, 147, 049	24, 684, 110	17, 259, 584	87, 910, 589	149, 001, 332
All other loans	129, 546, 152	146, 149, 205	110, 381, 881	574, 760, 143	960, 837, 381
Totals	245, 108, 332	200, 815, 928	151, 364, 826	706, 161, 705	1, 303, 450, 791

In the table below is given a full classification of the loans in New York City alone for the last five years:

Loans and discounts.	October 2, 1879.	October 1, 1880.	October 1, 1881.	October 3, 1882.	October 2 1883.
	47 banks.	47 banks.	48 banks.	50 banks.	48 banks.
On indorsed paper	$81, 520, 129	$107, 058, 860	$112, 049, 004	$118, 692, 651	$121, 644, 201
On single-name paper	22, 491, 926	27, 755, 152	26, 935, 878	21, 203, 573	19, 147, 051
On U. S. bonds on demand	8, 286, 525	3, 915, 077	2, 539, 928	11, 797, 687	2, 093, 527
On other stocks, &c., on demand	78, 062, 085	92, 630, 982	97, 249, 162	89, 582, 762	94, 321, 605
On real-estate security	670, 021	1, 386, 513	236, 100	304, 732	184, 083
All other loans	4, 821, 216	5, 731, 917	7, 747, 587	7, 600, 487	7, 717, 295
Totals	195, 851, 902	238, 428, 501	246, 757, 659	239, 041, 892	245, 108, 332

The attention of Congress has previously been called to section 5200 of the Revised Statutes, which places restrictions upon loans, and to the difficulty of enforcing its provisions. In cities where large amounts of produce are received and stored, it is represented that it is impossible for the banks to transact this class of business, if restricted to loans for an amount not exceeding in any instance one-tenth of their capital. It is true that the limitation does not apply to loans upon produce in transit, where the drafts are drawn on existing values; but if produce is stored, instead of being shipped, large loans cannot be made except in violation of law. In such case the Comptroller has no means of enforcing the law, except by bringing a suit for forfeiture of charter, and this course might result in great embarrassment to business, as well as loss to many innocent stockholders of the banks. It is evident that the law should be so amended as to exclude from the limitation mentioned legitimate loans upon produce or warehouse receipts, and some other classes of collateral security, as well as loans upon United States bonds.

RATES OF INTEREST IN NEW YORK CITY, AND IN THE BANK OF ENGLAND AND THE BANK OF FRANCE.

The average rate of interest in New York City for each of the fiscal years from 1874 to 1881, as ascertained from data derived from the Journal of Commerce and The Commercial and Financial Chronicle, was as follows:

1874, call loans, 3.8 per cent.; commercial paper, 6.4 per cent.
1875, call loans, 3.0 per cent.; commercial paper, 5.8 per cent.
1876, call loans, 3.3 per cent.; commercial paper, 5.3 per cent.
1877, call loans, 3.0 per cent.; commercial paper 5.2 per cent.
1878, call loans, 4.4 per cent.; commercial paper, 5.1 per cent.
1879, call loans, 4.4 per cent.; commercial paper, 4.4 per cent.
1880, call loans, 4.9 per cent.; commercial paper, 5.3 per cent.
1881, call loans, 3.8 per cent.; commercial paper, 5.0 per cent.*
1882, call loans, 4.4 per cent.; commercial paper, 5.4 per cent.*
1883, call loans, 5.7 per cent.; commercial paper, 5.7 per cent.*

The average rate of discount of the Bank of England for the same years was as follows:

During the calendar year ending December 31, 1874, 3.69 per cent.
During the calendar year ending December 31, 1875, 3.23 per cent.
During the calendar year ending December 31, 1876, 2.61 per cent.
During the calendar year ending December 31, 1877, 2.91 per cent.
During the calendar year ending December 31, 1878, 3.78 per cent.
During the calendar year ending December 31, 1879, 2.50 per cent.
During the calendar year ending December 31, 1880, 2.76 per cent.
During the calendar year ending December 31, 1881, 3.49 per cent.
During the calendar year ending December 31, 1882, 4.10 per cent.
During the fiscal year ending June 30, 1883, 3.7 per cent.

* From the *Financial Chronicle* only.

In the calendar year ending December 31, 1882, the rate of discount of the Bank of England was increased three times, and three times reduced. During the fiscal year ending June 30, 1882, the rate was increased once and decreased three times. The present rate is 3 per cent.

The average rate of interest in New York City for the four months previous to November 9, 1883, was on call loans 2.4 per cent., and on commercial paper 5.6 per cent.; the rate of interest on that date was on call loans 1 to 3 per cent., and on commercial paper 5½ to 6½ per cent.

The rate of discount in the Bank of France which was raised from 4 to 5 per cent. on October 20, 1881, was lowered to 4½ per cent. on February 23, 1882, to 4 per cent. on March 2, and lastly, on the 23d of the same month to 3½ per cent.

The average rate of discount during the year 1882 was 3.8 per cent.

The number of trade bills admitted to discount in the Bank of France during the year 1882 was 4,927,024, representing a sum of $1,027,887,300.*

Of this number of bills there were—

6,742 bills of $2.08 and under.
483,147 bills from $2.29 to $10.
734,437 bills from $10.21 to $20.
3,702,692 bills above $20.

That is to say, nearly a fourth part in bills under $20.21. The number of trade bills under $20 steadily increases. In 1880 there were 1,014,412 of these small discounted bills; in 1881, 1,160,945, and in 1882 they have increased to 1,224,326.

The governor of the Bank of France in his report of its transactions for the year 1882 says, "these figures will show how great are the services rendered by the bank to the retail trade of Paris."

TRANSACTIONS OF THE NEW YORK CLEARING HOUSE.

The New York Clearing-House Association is composed of forty-seven national and sixteen State banks, and the assistant treasurer of the United States at New York.

Through the courtesy of Mr. W. A. Camp, its manager, a statement of the transactions during the year ending October 1, 1883, has been obtained, which shows that the total exchanges were more than forty-six thousand millions of dollars, while the balances paid in money were nearly 1,600 millions. The daily average balances paid were somewhat more than $5,000,000, or about 3.9 per cent of the amount of the settlements. The balances paid in money during the year consisted of $1,020,039,000 in clearing-house certificates of the Bank of America, legal tenders amounting to $10,017,196, United States gold certificates, $530,718,000, and $6,854,000 in gold coin. Since the date of the issue of the new gold certificates (October 4), authorized by the act of July 12, 1882, the balances due from the Government have been paid in these certificates instead of coin, thus dispensing with the movement of large amounts in bags and upon drays from the Treasury to the custody of the banks. The following table shows the yearly transactions of the New York clearing-house for the thirty years since its organization in

* In the table 5 francs are counted as being equal one dollar.

1853, and the amounts and ratios of currency required for the payment of daily balances:

Years.	No. of banks.	Capital.*	Exchanges.	Balances paid in money.	Average daily exchanges.	Average daily balances paid in money.	Ratios.
							Per ct.
1854	50	$47,044,900	$5,750,455,987	$297,411,404	$19,104,505	$988,078	5.2
1855	48	48,884,180	5,362,912,098	289,694,137	17,412,052	940,565	5.4
1856	50	52,883,700	6,906,213,329	334,714,489	22,278,108	1,079,724	4.8
1857	50	64,429,200	8,333,226,718	365,313,902	26,968,371	1,182,246	4.4
1858	46	67,146,018	4,756,604,386	314,238,911	15,393,736	1,016,954	6.6
1859	47	67,921,714	5,448,005,956	363,984,683	20,857,333	1,177,944	5.6
1860	50	69,907,435	7,231,143,057	380,693,438	23,401,757	1,232,018	5.3
1861	50	68,900,605	5,915,742,758	353,383,944	19,269,520	1,151,088	6.0
1862	50	68,375,820	6,871,443,591	415,530,331	22,237,682	1,344,758	6.0
1863	50	68,972,508	14,867,597,849	677,626,483	48,428,657	2,207,252	4.6
1864	49	68,580,763	24,097,196,656	885,719,205	77,984,455	2,866,405	3.7
1865	55	80,363,013	26,032,384,342	1,035,765,108	84,796,040	3,373,828	4.0
1866	58	82,370,200	28,717,146,914	1,066,135,106	93,541,195	3,472,753	3.7
1867	58	81,770,200	28,675,159,472	1,144,963,451	93,101,107	3,717,414	4.0
1868	59	82,270,200	28,484,288,637	1,125,455,237	92,182,164	3,642,250	4.0
1869	59	82,720,200	37,407,028,987	1,120,318,308	121,451,393	3,637,397	3.0
1870	61	83,620,200	27,804,539,406	1,036,484,822	90,274,479	3,365,210	3.7
1871	62	84,420,200	29,300,986,682	1,209,721,029	95,133,074	3,927,666	4.1
1872	61	84,420,200	33,844,360,568	1,428,582,707	109,884,317	4,636,632	4.2
1873	59	83,370,200	35,461,052,826	1,474,508,025	115,885,794	4,818,654	4.1
1874	59	81,635,200	22,855,927,636	1,286,753,176	74,692,574	4,205,076	5.7
1875	59	80,435,200	25,061,237,902	1,408,608,777	81,899,470	4,603,297	5.6
1876	59	81,731,200	21,597,274,247	1,295,042,029	70,349,428	4,218,378	5.9
1877	58	71,085,200	23,289,243,701	1,373,996,302	76,358,176	4,504,906	5.9
1878	57	63,611,500	22,508,428,442	1,307,843,857	73,555,988	4,274,000	5.8
1879	59	60,800,200	25,178,770,691	1,400,111,063	82,015,540	4,560,622	5.6
1880	57	60,475,200	37,182,128,021	1,516,538,631	121,510,224	4,956,009	4.1
1881	60	61,162,700	48,565,818,212	1,776,018,162	159,232,191	5,823,010	3.5
1882	61	60,962,700	46,552,846,161	1,595,000,245	151,637,935	5,195,440	3.4
1883	63	61,162,700	40,293,165,258	1,568,983,196	132,543,307	5,161,129	3.9
		†70,711,000	‡685,352,410,090	‡29,849,140,248	†70,446,354	†3,242,690	4.6

The total amount of transactions for the twenty-nine years given in the table is $685,352,410,090, and the annual average is $22,845,080,336.

The clearing-house transactions of the assistant treasurer of the United States at New York, for the year ending November 1, 1883, were as follows:

Exchanges received from clearing-house	$305,308,669 98
Exchanges delivered to clearing-house	123,578,004 83
Balances paid to clearing-house	183,442,561 27
Balances received from clearing-house	1,713,896 12
Showing that the amount paid by the assistant treasurer to the clearing-house was in excess of the amount received by him	181,728,665 15

A table compiled from statements made by the New York clearing-house, giving the clearings and balances weekly for the months of September, October, and November, of the years from 1878 to 1883, will be found in the appendix, and are valuable for purposes of comparison.

The following interesting table has been copied from The Public, of New York City, of November 8, which gives the latest information concerning the exchanges at New York and other cities having clearing-houses, for the week ending November 3, 1883, comparing them with those for the corresponding week in 1882, and showing the percentage of differences. The exchanges at the same places for the month ending November 3, 1883, are also given, with the percentage of differences re-

*The capital is for various dates, the amounts at a uniform date in each year not being obtainable.
†Yearly averages for thirty years. ‡Totals for thirty years.

sulting from a comparison with the exchanges for the same month of the previous year.

	Week.			October.		
	1883.	1882.	Per cent.	1883.	1882.	Per cent.
New York	$817,996,284	$991,296,926	— 17.5	$3,831,718,815	$4,384,692,605	— 12.6
Boston	77,034,702	82,053,554	— 6.1	326,154,461	330,610,821	— 1.3
Philadelphia	54,734,467	61,832,953	— 11.5	265,345,366	250,864,077	+ 5.8
Chicago	52,290,729	55,402,262	— 5.8	233,382,807	223,323,336	+ 4.5
Saint Louis	15,611,326	17,080,955	— 8.6	74,496,955	74,939,115	— .6
Baltimore	14,159,848	15,040,369	— 5.9	65,253,165	61,506,526	+ 6.1
San Francisco	14,116,594	15,683,584	— 9.9	58,899,453	58,366,475	+ .8
Cincinnati	10,566,300	9,992,950	+ 5.7	46,698,950	41,150,400	+ 13.5
New Orleans	10,236,633	11,077,343	— 7.6	42,636,890	47,817,804	— 10.8
Pittsburgh	9,196,834	11,377,592	— 19.2	40,029,954	50,185,748	— 20.2
Louisville	5,574,710	4,337,758	+ 27.3	20,377,144	16,843,123	+ 21.0
Providence	4,269,000	5,285,400	— 19.2	25,954,600	21,875,800	+ 18.6
Milwaukee	4,054,058	3,973,632	+ 2.7	16,531,865	16,638,398	— .6
Detroit	2,859,651			13,920,430		
Kansas City	2,614,750	2,445,900	+ 11.4	12,823,250	10,029,300	+ 27.8
Cleveland	2,550,172	2,146,674	+ 18.8	10,062,468	9,786,184	+ 2.8
Hartford	1,654,245	1,595,492	+ 3.7	8,019,839	7,760,751	+ 3.3
Memphis	1,647,654	1,531,443	+ 7.6	5,751,259	4,211,555	+ 36.6
Indianapolis	1,628,123	2,273,621	— 28.4	7,092,972	8,109,769	— 12.5
Columbus	1,477,885	1,146,149	+ 28.8	6,149,411	4,754,479	+ 29.3
New Haven	1,264,922	1,531,789	— 17.5	5,434,781	6,137,014	— 11.4
Peoria	1,244,180	1,043,378	+ 19.2	4,596,986	4,272,397	+ 7.6
Portland	1,071,846	1,363,402	— 21.4	4,512,412	4,800,000	— 5.9
Springfield	854,667	1,032,699	— 17.2	3,798,636	3,723,880	+ 2.0
Worcester	848,431	880,583	— 3.7	4,072,912	4,594,325	— 11.3
Saint Joseph	702,725	620,321	+ 13.3	2,685,789	2,698,074	— .5
Lowell	624,475	752,149	— 17.0	2,893,936	3,315,164	— 12.7
Syracuse	621,199	739,790	— 16.0	2,737,017	2,257,111	+ 21.3
Total	1,109,205,859	1,304,228,418	— 15.0	5,128,022,093	5,655,270,222	— 9.5
Out. New York	291,209,575	312,931,492	— 6.9	1,296,303,278	1,270,577,617	+ 2.0

The following table exhibits the transactions of clearing-houses located in 24 cities, for the year ending October 1, 1883, from official returns received by the manager of the New York Clearing-House:

Cities.	Exchanges.	Balances.
Boston, Mass	$3,540,980,659 00	$437,052,430 00
Philadelphia, Pa	2,794,181,748 96	238,302,087 25
Chicago, Ill	2,507,022,178 00	266,597,620 00
Saint Louis, Mo	874,272,698 00	146,133,728 00
Baltimore, Md	695,499,933 09	88,460,175 60
Pittsburgh, Pa	538,134,071 54	90,785,404 12
New Orleans, La	515,655,203 00	53,729,805 00
Cincinnati, Ohio	486,177,850 00	(*)
Providence, R. I	236,558,200 00	(*)
Louisville, Ky	203,580,839 00	47,082,302 71
Milwaukee, Wis	174,911,297 45	28,991,866 02
Detroit, Mich	191,816,936 92	15,363,751 51
Cleveland, Ohio	110,756,380 00	(*)
Hartford, Conn	92,785,885 47	‡26,000,000 00
New Haven, Conn	64,135,000 61	15,229,885 83
Columbus, Ohio	60,206,815 00	10,547,075 00
Memphis, Tenn	54,671,255 45	10,889,190 02
Peoria, Ill	50,961,493 00	(*)
Worcester, Mass	44,243,340 00	14,047,050 00
Springfield, Mass	40,861,119 29	12,036,132 87
Lowell, Mass	36,752,968 36	13,766,120 58
Syracuse, N. Y	22,903,350 99	6,044,952 19
Saint Joseph, Mo	5,826,852 00	291,382 60
New York City	40,293,165,257 65	1,568,983,196 15
Twenty-four cities	53,536,061,332 78	3,090,334,770 45

From the above table it will be seen that the exchanges in New York city amounted to 75.3 per cent. of the whole sum, and the balances in that city were more than one-half of the amount stated.

New York City, 75.3 per cent. of total exchanges; 50.8 per cent. of total balances.

* No record kept. † Organized February, 1883. ‡ Estimated.

COUNTRY CLEARING.

The London Clearing-House includes in its operations a system of clearing checks which are received by London bankers from correspondents, and which are drawn upon banks and bankers in different parts of England. The country clearing is a modification of the town clearing, and has been established twenty-five years. The number of country banks and branches whose checks are cleared through the London Clearing-House is 418.

As there has been some movement toward the organization of a bank in Boston for the purpose of collecting checks drawn on New England banks outside of that city, the following description of "the country clearing" from the London Bankers' Magazine, of October, 1883, will be of interest:

The outside world has no idea of the immense number of country checks which pass through the house in the course of a day. You see, a man buying goods in London and wishing to send payment, can, if he choose, get a postal or post-office order, but this entails more expense, and certainly far more trouble than writing a check. The number of country checks in daily circulation is decidedly on the increase. Now that the parcels post has come into operation, doubtless a still further impetus will be given to the custom of sending to London checks drawn on banks in the country. Now, in the ordinary course of things a banker will not put a country check to a customer's credit forthwith, but will first of all collect it, and then credit his customer's account with the proceeds. This would necessitate a delay of two or three days and give an immense amount of trouble to the banker—supposing the country clearing to be non-existent—infinitely increase the risk of loss, and would as well infinitely increase the delay through the post by reason of the augmentation of letters containing checks for collection. But all this is obviated. As we have already seen, the book-credit system gradually extended itself till it in reality produced the clearing-house. So the clearing-house has so far developed itself as to take under its maternal wing not only the checks and drafts drawn on and payable at certain London banks, but also at banks all over the country, which have for agents some of the clearing-banks in the metropolis. Separate tables of the amount paid through the country clearing we are afraid we shall not be able to furnish. With regard to the system itself, the country clearers of the clearing-banks, twenty-seven in number, take these checks received by their bank, drawn on country banks which have London head offices or agents, and sort them according to the agents' names. The same ruling and heading is required in the country as in the town books, only the size is much smaller. The clearer then casts his various sets, or charges, of checks and drafts, putting an amount on the back of each bundle, and delivers them at the house in the same way as the morning town charges have been delivered. The country clearing is from 12 till 2:15 p. m. The clearer at the house itself will receive from the other banks charges, or batches of drafts, on the country banks for which his establishment acts as agent. These he enters under the heading of the bank which has handed them in. As there is but one delivery the work is soon run through, and when finished the "sheet" is made out in the same way as in the clearing-house; but here is the essential difference—the balances are not really paid for three days; and so, of course, the balances which are received or paid each day are really the result and clearing of transactions of three days back. When we say three days we would be understood to include the day on which the checks are presented and the day on which they are paid, so that one clear day is left between for postage. The clearers, when they have entered all their charges and agreed their balances, take the cheeks, &c., to their offices, where they are sorted according to the banks on which they are drawn and dispatched without delay to the country banks for payment. In all respects the country bank is treated as a branch of its London agent, and so the transaction of crediting and debiting charges is carried on in almost exactly the same way as between a bank and its branch in the city.

CLEARING-HOUSE CERTIFICATES.

Section 5192 Revised Statutes provides that clearing-house certificates, representing specie or lawful money specially deposited for the purposes of any clearing-house association, shall also be deemed to be lawful money in the possession of any association belonging to such clearing-house holding and owning such certificate; and section 5193 provides that the Secretary of the Treasury may receive United States

notes on deposit, without interest, from any national banking association, in sum not less than ten thousand dollars, and issue certificates therefor in denominations of not less than five thousand dollars, which certificates may be counted as part of the lawful money reserve, and may be accepted in the settlement of clearing-house balances at the places where the deposits therefor were made.

The legal-tender note certificates were first issued in the fiscal year 1873. On June 30, 1875, there were outstanding $59,045,000 of these certificates, of which the national banks held $47,310,000. On June 30, 1876, the amount outstanding was $33,140,000, of which the banks held $27,955,000. On June 30, 1879, the amount had been reduced to $29,330,000, and the banks held on June 14 of the same year, $25,180,000. The amount outstanding on October 3, 1882, was $10,725,000, and the national banks held on that day $8,645,000.

The issue of the gold certificates was authorized by the fifth section of the act of March 3, 1863, and they were used for clearing-house purposes soon after the passage of the national-bank act. The first issue was made on November 13, 1865. On June 30, 1875, there were outstanding $21,796,300, of which the national banks in New York City held $12,642,180. The issue of these certificates was discontinued on December 1, 1878, and the amount outstanding had decreased on June 30, 1879, to $15,413,700, and on October 1, 1880, to $7,480,100. The amount outstanding on October 3, 1882, was $4,907,440, of which the national banks held $4,594,300. The issue of gold certificates having been discontinued by the Government, and the amount of gold coin having rapidly increased, the banks in New York found it necessary to establish a depository of gold coin for the convenience of the clearing-house. This depository at the present time is the Bank of America, by which bank certificates of deposit were first issued on October 14, 1879. The amount of such certificates outstanding on October 1, 1883, was $22,955,000; on January 1, 1880, $25,610,000. The largest amount of coin on deposit was on January 21, 1882, viz, $45,330,000, the capacity of the vault having been increased since 1880. Of this amount, the national banks of New York City held on June 22, 1883, $22,139,000; on October 2, $20,345,000.

The act of February 28, 1878, authorized any holder of silver dollars of the weight of 412½ grains troy of standard silver, to deposit the same with the Treasurer, or any assistant treasurer, of the United States, in sums not less than ten dollars, and receive therefor certificates of not less than ten dollars each, corresponding with the denominations of the United States notes. It required that the coin deposited, or representing the certificates, should be retained in the Treasury for the payment of the same on demand, and that said certificates should be receivable for customs, taxes, and all public dues, and also authorized their reissue. This act did not authorize their use as clearing-house certificates, nor make them available as reserve for the national banks.

The act of July 12, 1882, authorized and directed the Secretary of the Treasury to receive deposits of gold coin in denominations of not less than $20 each, corresponding with the denominations of United States notes. The coin deposited for the certificates is required to be retained for the payment of the same on demand, and these certificates, and also silver certificates, are authorized to be counted as part of the lawful reserve of the national banks.

The amount of silver certificates outstanding on November 1, less the amount held by the Treasury, was $85,334,381. The amount of gold certificates November 1, 1883, less the amount held by the Treas- was $52,075,880.

SPECIE IN BANK AND IN THE TREASURY OF THE UNITED STATES, AND ESTIMATED AMOUNT IN THE COUNTRY—SPECIE IN THE BANK OF ENGLAND AND IN THE BANK OF FRANCE.

The following table exhibits the amounts of specie held by the national banks at the dates of their reports for the last eleven years, the coin and coin certificates held by the New York City banks being stated separately:

Dates.	Held by national banks in New York City.				Held by other national banks.	Aggregate.
	Coin.	U. S. gold certificates.	Clearing-house certificates.	Total.		
Sept. 12, 1873..	$1,063,210 55	$13,522,600	.....	$14,585,810 55	$5,282,658 90	$19,868,469 45
Dec. 26, 1873..	1,376,170 50	18,325,760	.....	19,701,930 50	7,205,107 08	26,907,037 58
Feb. 27, 1874..	1,167,820 09	23,518,640	.....	24,686,460 09	8,679,403 49	33,365,863 58
May 1, 1874..	1,530,282 10	23,454,660	.....	24,984,942 10	7,585,027 16	32,569,969 26
June 26, 1874..	1,842,525 00	13,671,660	.....	15,514,185 00	6,812,022 27	22,326,207 27
Oct. 2, 1874..	1,291,786 56	13,114,480	.....	14,406,266 56	6,834,678 67	21,240,945 23
Dec. 31, 1874..	1,443,215 42	14,410,940	.....	15,854,155 42	6,582,605 62	22,436,761 04
Mar. 1, 1875..	1,084,555 54	10,622,160	.....	11,706,715 54	4,960,390 63	16,667,106 17
May 1, 1875..	930,105 76	5,753,220	.....	6,683,325 76	3,937,035 88	10,620,361 64
June 30, 1875..	1,023,015 86	12,642,180	.....	13,665,195 86	5,294,386 44	18,959,582 30
Oct. 1, 1875..	753,904 90	4,201,720	.....	4,955,624 90	3,094,704 83	8,050,329 73
Dec. 17, 1875..	869,436 72	12,532,810	.....	13,402,246 72	3,668,659 18	17,070,905 90
Mar. 10, 1876..	3,261,131 36	19,086,920	.....	22,348,051 36	6,729,294 49	29,077,345 85
May 12, 1876..	832,313 70	15,183,760	.....	16,016,073 70	5,698,520 66	21,714,594 36
June 30, 1876..	1,214,522 92	16,872,780	.....	18,087,302 92	7,131,167 00	25,218,469 92
Oct. 2, 1876..	1,120,814 34	13,446,760	.....	14,576,574 34	6,785,079 69	21,361,654 03
Dec. 22, 1876..	1,434,701 83	21,602,900	.....	23,037,601 83	9,962,046 06	32,999,647 89
Jan. 20, 1877..	1,669,284 94	33,629,660	.....	35,298,944 94	14,410,322 61	40,709,267 55
Apr. 14, 1877..	1,930,725 59	13,889,180	.....	15,829,905 59	11,240,132 19	27,070,037 78
June 22, 1877..	1,423,258 17	10,324,320	.....	11,747,578 17	9,588,417 89	21,335,996 06
Oct. 3, 1877..	1,538,486 47	11,409,920	.....	12,948,406 47	9,710,413 84	22,658,820 31
Dec. 28, 1877..	1,955,746 20	19,119,080	.....	21,074,826 20	11,832,924 50	32,907,750 70
Mar. 15, 1878..	2,428,797 44	35,003,220	.....	37,432,017 44	17,290,040 58	54,722,058 02
May 1, 1878..	2,688,092 06	25,397,640	.....	28,085,732 06	17,938,024 00	46,023,756 06
June 29, 1878..	1,905,705 22	11,954,500	.....	13,860,205 22	15,391,264 55	29,251,469 77
Oct. 1, 1878..	1,779,792 43	11,514,810	.....	13,294,602 43	17,394,004 16	30,688,606 59
Dec. 6, 1878..	4,009,299 01	12,277,180	.....	16,286,479 01	18,068,771 35	34,355,250 36
Jan. 1, 1879..	5,421,552 49	12,739,544	.....	18,161,092 49	23,338,664 83	41,499,757 32
Apr. 4, 1879..	5,312,966 90	12,220,940	.....	17,533,906 90	23,614,656 51	41,148,563 41
June 14, 1879..	6,058,472 34	12,291,270	.....	18,349,742 34	23,983,545 10	42,333,287 44
Oct. 2, 1879..	7,218,967 69	12,130,900	.....	19,349,867 69	22,823,873 54	42,173,731 23
Dec. 12, 1879..	20,096,249 64	8,366,140	$21,569,000 00	50,031,389 64	28,981,651 95	79,013,041 59
Feb. 21, 1880..	12,252,541 44	7,464,650	35,855,000 00	55,572,191 44	33,869,860 31	89,442,051 75
Apr. 23, 1880..	12,595,720 49	6,914,250	25,458,000 00	44,967,970 49	41,461,761 72	86,429,732 21
June 11, 1880..	16,682,226 40	7,810,200	33,337,000 00	57,829,426 40	41,677,078 86	99,506,505 26
Oct. 1, 1880..	16,104,855 28	7,489,700	36,189,000 00	59,783,555 28	49,562,954 11	109,346,509 49
Dec. 31, 1880..	19,773,859 01	6,709,900	28,246,000 00	54,729,759 01	52,443,141 91	107,172,900 92
Mar. 11, 1881..	15,924,683 90	4,825,300	30,809,000 00	51,558,983 90	53,597,211 36	105,156,195 26
May 6, 1881..	26,242,108 60	4,025,900	34,176,000 00	65,044,008 60	57,584,553 48	122,628,562 08
June 30, 1881..	20,822,700 87	4,518,400	41,853,000 00	67,194,100 87	61,444,736 63	128,638,927 50
Oct. 1, 1881..	15,317,168 04	4,486,600	31,721,000 00	51,524,768 04	62,809,968 08	114,334,736 12
Dec. 31, 1881..	16,352,630 49	4,037,600	33,852,000 00	54,242,230 49	59,438,409 11	113,680,639 60
Mar. 11, 1882..	17,093,447 39	4,075,800	29,907,000 00	51,076,247 39	58,907,863 65	109,984,111 04
May 19, 1882..	15,541,956 93	4,034,300	31,783,000 00	51,359,256 93	61,056,549 80	112,415,806 73
July 1, 1882..	14,278,290 77	4,005,100	32,854,000 00	51,137,390 77	60,556,871 77	111,694,262 54
Oct. 3, 1882..	14,391,783 74	3,908,100	26,224,000 00	44,523,883 74	58,333,894 53	102,857,778 27
Dec. 30, 1882..	10,811,726 69	17,720,100	22,020,000 00	50,551,826 69	55,875,332 71	106,427,159 40
Mar. 13, 1883..	10,060,551 05	10,813,320	21,818,000 00	42,691,871 05	55,270,495 29	97,962,366 34
May 1, 1883..	9,891,636 15	16,694,210	21,334,000 00	47,319,846 15	56,287,420 17	103,607,266 32
June 22, 1883..	8,219,744 22	25,477,760	22,159,000 00	56,836,504 22	58,517,890 40	115,354,394 62
Oct. 2, 1883..	9,388,077 82	20,541,100	20,345,000 00	50,274,173 82	57,543,809 71	107,817,983 53

The national banks held silver coin amounting, on October 1, 1877, to $3,700,703, and on October 1, 1878, to $5,392,628. On October 2, 1879, the amount held was $4,936,493, and on October 1, 1880, it was $6,495,477, including $1,165,120 in silver treasury certificates; on October 3, 1882, it was $8,273,815, including $1,807,600 of silver certificates, and on October 2, 1883, it was $10,247,926, including $2,653,030 of silver certificates. On October 1 of the present year the official reports of the State banks in New England, New York, Pennsylvania, Maryland, Georgia, Ohio, *Indiana, Michigan,* Wisconsin, Missouri, and

Minnesota show that these banks then held specie amounting to $9,729,817, of which the banks in New York City held $6,185,509. The official returns from the State banks of California do not give separately the amount of coin held by them; but it is estimated that of the total cash reported, amounting to $8,109,198, $7,700,000 consisted of coin. The amount of coin held by State banks in the States before mentioned, including California, was, therefore, $17,429,817.

The Director of the Mint, in his report for 1881, estimates the amount of coin in the country on June 30, 1880, at $501,555,711, of which $358,958,691 was gold and $142,597,020 was silver. His estimate for the fiscal year ending June 30, 1883, is as follows:

United States coin.	Gold.	Silver.	Total.
Circulation June 30, 1882	$500,862,185	$199,573,360	$700,435,545
Coinage for the year, less deposits for recoinage	35,582,798	28,198,541	63,761,339
Excess of exports over imports	3,309,811	519,298	3,829,109
Total	539,754,794	228,291,199	768,045,993
Less amounts used in the arts	2,500,000	75,000	2,575,000
Circulation July 1, 1883	537,254,794	228,216,199	765,470,995

From July 1, 1883, to November 1, there has been added to the coin $9,842,694 of gold and $9,466,216 of silver, making the stock of coin in the country at the latter date $784,779,903, of which $547,097,488 was gold and $237,682,415 was silver.

The amount of bullion in the mint and in the New York assay office on November 1 is stated to have been $62,392,847 of gold and $4,936,365 of silver, making in all $67,329,212; which, added to the amount of coin stated above, gives $852,109,115, of which amount $609,490,335 was gold and $242,618,780 was silver.

The following table shows the amount of gold and silver, including the amount held to protect gold and silver certificates, and the percentage of each, in the Treasury of the United States, on September 30 of each year from 1876 to 1883, and on November 1, 1883:

Period.	Silver.			Gold coin and bullion.	Total coin and bullion.	Per cent of—	
	Standard dollars.	Other coin and bullion.	Total silver.			Silver.	Gold.
Sept. 30, 1876		$6,029,367	$6,029,367	$55,423,059	$61,452,426	9.8	90.2
Sept. 30, 1877		7,425,454	7,425,454	107,039,529	114,464,983	6.5	93.5
Sept. 30, 1878	$12,155,205	15,777,937	27,933,142	136,036,302	163,969,444	17.0	83.0
Sept. 30, 1879	31,806,774	21,173,023	52,979,797	169,827,571	222,807,368	23.8	76.2
Sept. 30, 1880	47,784,744	30,878,286	78,663,030	135,641,450	214,304,480	36.7	63.3
Sept. 30, 1881	66,092,667	28,945,297	96,037,964	174,361,343	269,399,307	35.3	64.7
Sept. 30, 1882	92,228,649	30,769,705	122,998,354	152,739,106	275,737,460	44.6	55.4
Sept. 30, 1883	114,587,372	31,858,072	146,445,444	206,130,543	352,575,987	41.5	58.5
Nov. 1, 1883	116,036,450	31,648,789	147,685,239	209,429,940	357,115,179	41.4	58.6

The bullion in the Bank of England for each year from 1870 to 1883 is shown in the following table, the pound sterling being estimated at five dollars:

1870	$103,900,000	1877	$126,850,000
1871	117,950,000	1878	119,200,000
1872	112,900,000	1879 *	150,942,980
1873	113,500,000	1880 †	141,637,000
1874	111,450,000	1881 †	115,221,870
1875	119,600,000	1882 †	108,689,912
1876	143,500,000	1883 †	121,779,545

* London Economist, November 8, 1879.

† *London Bankers' Magazine*, October, 1880, 1881, and 1882.

Below is a similar table, giving the amount of gold and silver, and the percentage of each, in the Bank of France, on December 31 of each year* from 1870 to 1882, and on November 1, 1883, five francs being estimated at one dollar:

Years.	Silver coin and bullion.	Gold coin and bullion.	Total.	Per cent. of—	
				Silver.	Gold.
December 31, 1870	$13,700,000	$85,740,000	$99,440,000	13.8	86.2
December 31, 1871	16,240,000	110,680,000	126,920,000	12.8	87.2
December 31, 1872	26,520,000	131,740,000	158,260,000	16.8	83.2
December 31, 1873	31,260,000	122,260,000	153,520,000	20.4	79.6
December 31, 1874	62,640,000	204,220,000	266,860,000	23.5	76.5
December 31, 1875	101,000,000	234,860,000	335,860,000	30.1	69.9
December 31, 1876	127,720,000	306,080,000	433,800,000	29.4	70.6
December 31, 1877	173,080,000	235,420,000	408,500,000	42.4	57.6
December 31, 1878	211,620,000	196,720,000	408,340,000	51.8	48.2
December 31, 1879	245,520,000	148,320,000	393,840,000	62.3	37.7
December 31, 1880	244,360,000	110,480,000	354,840,000	68.9	31.1
December 31, 1881	231,180,000	129,160,000	360,340,000	64.2	35.8
December 31, 1882	216,553,000	190,981,000	407,534,000	53.1	46.9
November 1, 1883	203,085,000	192,112,000	395,197,000	51.3	48.7

SECURITY FOR CIRCULATING NOTES.

During previous years there have been many changes in the classes of United States bonds held by the national banks as security for their circulation, owing to the payment or refunding or extension of the different issues of five and six per cent. bonds bearing interest at four and a half, four, three and a half, and three per cent. During the preceding year 259 millions of three and a half per cent. bonds held by the banks, which were extended from five or six per cent. bonds in the year 1881, have been changed into three per cent bonds, and during the present year ending November 1, 1883, all of the remaining three and a half per cent. bonds have been called for payment, of which the national banks held about 40 millions. The amount of United States bonds held by the Treasurer as security for the circulating notes of the national banks on the first day of November, 1883, is exhibited in the following table:

Class of bonds.	Authorizing act.	Rate of interest.	Amount.
		Per cent.	
Funded loan of 1891	July 14, 1870, and January 20, 1871	4½	$41,319,700
Funded loan of 1907	do do	4	106,164,850
Funded loan of 1881 continued	do do	3½	632,000
Funded loan of July 12, 1882	July 12, 1882	3	201,327,750
Pacific Railway bonds	July 1, 1862, and July 2, 1864	6	3,463,000
Total			352,937,300

During the year 1871, and previous thereto, a large portion of the bonds bore interest at the rate of 6 per cent., and until the year 1877 all of the bonds bore interest at either 5 or 6 per cent. The five or six per cent. bonds, in the year 1881, entirely disappeared from the list of these securities, with the exception of three and a half millions of

* The Bulletin de Statistique, as quoted in the Bankers' Magazine, New York, vol. xiii, page 740; except the items for 1879–'80 and '81, which were obtained from the London Bankers' Magazine for August, 1880, page 661, September, 1881, page 716, and September, 1882, page 739, and the last item from L'Economist Francais, November 3, 1883.

Pacific sixes, and during the present year the three and a half per cents have in like manner disappeared, with the exception of six hundred and thirty-two thousand which have been called.

At the present time more than 57 per cent. of the amount pledged for circulation, consists of bonds bearing interest at 3 per cent. only, and the remainder, with the exception of three and a half millions of Pacifics, bear interest at the rate of 4 and 4½ per cent.

STATE BANKS, TRUST COMPANIES, AND SAVINGS BANKS.

The act of Congress of February 19, 1873, section 333 of the United States Revised Statutes, requires the Comptroller to obtain from authentic sources, and report to Congress, statements exhibiting, under appropriate heads, the resources and liabilities of such banks and savings banks as are organized under the laws of the several States and Territories. In compliance with this act, he has presented annually in the appendices to his reports, the resources and liabilities of these corporations, so far as it has been possible to obtain them. Through the courtesy of State officers, returns of State banks, savings banks, and trust and loan companies have, during the past year, been received from twenty-four States. Many of the States and Territories, including Virginia, West Virginia, North Carolina, Alabama, Arkansas, Tennessee, Illinois, Kansas, Oregon, and Dakota, do not require periodical returns of the condition of the different classes of banks organized under their laws.

From these returns the following abstract has been compiled, showing the resources and liabilities of State banks and trust companies for the last four years, the number reported in 1880 being 650; in 1881, 683; in 1882, 704, and in 1883, 788:

	1880.	1881.	1882.	1883.
	650 banks.	683 banks.	704 banks.	788 banks.
RESOURCES.				
Loans and discounts	$281, 496, 731	$352, 725, 980	$404, 574, 420	$462, 380, 585
Overdrafts	597, 699	1, 407, 695	1, 373, 116	1, 493, 636
United States bonds	26, 252, 182	27, 680, 025	25, 673, 984	22, 725, 596
Other stocks, bonds, &c	35, 661, 792	42, 330, 957	45, 658, 783	52, 405, 724
Due from banks	40, 340, 345	54, 662, 829	57, 973, 718	68, 270, 664
Real estate	19, 489, 086	21, 396, 772	19, 915, 682	20, 160, 547
Other assets	7, 374, 037	11, 941, 741	13, 685, 205	14, 190, 044
Expenses	979, 402	1, 136, 427	1, 193, 345	1, 131, 586
Cash items	11, 176, 502	16, 900, 762	18, 546, 073	35, 206, 862
Specie	6, 905, 977	17, 925, 628	17, 902, 760	18, 255, 300
Legal tenders, bank notes, &c	51, 500, 226	27, 391, 317	27, 322, 912	28, 259, 069
Total	481, 774, 159	575, 500, 139	633, 819, 998	724, 479, 613
LIABILITIES.				
Capital stock	109, 318, 451	112, 111, 325	113, 561, 931	125, 233, 036
Circulation	283, 308	274, 941	286, 391	187, 978
Surplus fund	25, 008, 431	27, 857, 976	31, 504, 352	34, 575, 461
Undivided profits	10, 774, 731	12, 237, 320	14, 758, 438	18, 076, 610
Dividends unpaid	486, 094	576, 413	577, 419	465, 011
Deposits	298, 759, 619	373, 092, 632	426, 677, 092	500, 374, 217
Due to banks	18, 613, 336	19, 105, 664	18, 409, 351	20, 918, 936
Other liabilities	18, 530, 189	30, 303, 868	28, 245, 024	24, 648, 364
Total	481, 774, 150	575, 500, 139	633, 819, 998	724, 479, 613

The foregoing table was prepared from returns from all the New England States, except Maine; from four Middle States, not including Delaware, and from all the Western States, excepting Illinois, Kansas, and

Nebraska. The only Southern States from which reports have been received were South Carolina, Georgia, Louisiana, Texas, Kentucky, and Missouri. The only Pacific States were California and Colorado. There are no State banks in Maine, but one in New Hampshire, six in Vermont, and none in Massachusetts. There are, however, six trust and loan companies in the latter State, one in Rhode Island, and six in Connecticut.

SAVINGS BANKS.

The following table exhibits the aggregate resources and liabilities of 629 savings banks in 1880, 1881, and 1882, and 630 in 1883:

	1880.	1881.	1882.	1883.
	629 banks.	629 banks.	629 banks.	630 banks.
RESOURCES.				
Loans on real estate	$315, 273, 232	$307, 096, 158	$307, 089, 227	$328, 197, 858
Loans on personal and collateral security	70, 175, 090	95, 817, 641	128, 483, 698	155, 874, 522
United States bonds	187, 413, 220	210, 845, 514	237, 786, 442	219, 017, 313
State, municipal, and other bonds and stocks	150, 440, 359	159, 819, 942	206, 291, 274	190, 629, 915
Railroad bonds and stocks	20, 705, 378	27, 069, 048	32, 994, 578	41, 695, 701
Bank stock	32, 225, 923	33, 249, 203	35, 365, 717	36, 587, 817
Real estate	39, 038, 502	41, 987, 674	39, 882, 429	37, 224, 601
Other assets	27, 053, 452	37, 408, 163	11, 047, 346	53, 235, 771
Expenses	216, 423	135, 572	132, 204	144, 223
Due from banks	22, 063, 091	40, 603, 641	38, 977, 135	43, 184, 629
Cash	17, 072, 680	13, 758, 106	14, 932, 015	12, 998, 594
Total	881, 677, 350	967, 790, 662	1, 052, 982, 065	1, 118, 790, 944
LIABILITIES.				
Deposits	819, 106, 973	891, 961, 142	966, 797, 081	1, 024, 856, 787
Surplus fund	51, 226, 472	60, 289, 905	69, 454, 512	72, 784, 155
Undivided profits	4, 740, 861	10, 325, 800	11, 136, 219	15, 738, 223
Other liabilities	6, 603, 044	5, 213, 815	5, 594, 253	5, 411, 779
Total	881, 677, 350	967, 790, 662	1, 052, 982, 065	1, 118, 790, 944

The foregoing table includes the returns from six New England States, from four Middle States, not including Delaware; from the States of Ohio, Indiana, California, and the District of Columbia. The aggregate of loans in the New England States is $272,112,554, and of deposits $453,890,090. In the Middle States the aggregate of loans is $169,101,770, and of deposits $499,044,206.

Some of the largest savings banks in the city of Philadelphia, organized under old charters, are not required to make reports to any State officer. Returns received directly from four of these banks, having deposits amounting to $32,347,733 are included in the returns from the State of Pennsylvania.

The savings banks deposits, given in the foregoing table for 1883, based upon reports made to State authorities, are $1,024,856,787, and the deposits of the State banks and trust companies were $500,374,217. These returns do not include bank deposits. The deposits of the national banks on October 2, 1883, exclusive of those due to banks, were $1,063,601,156. These deposits of the national banks bear to those of the savings banks the proportion nearly of 51 to 49; to those of the State banks and trust companies the proportion of 68 to 32; and to the combined deposits of both the proportion of 41 to 59.

The total population of New England, according to the census of 1880, was 4,010,529, and the number of open-deposit accounts of the savings banks in the year 1883 is 1,368,997, which is equal to 34.1 accounts to each one hundred of the entire population. The average amount of each account is $331.55, and if the total deposits were divided among the entire population the average sum of $113.17 could be given to each individual.

The deposits of the savings banks in the State of New York were $412,147,213, while the population is 5,082,871, showing that an equal distribution of the savings-banks deposits among the entire population of the State would give $81.08 to each individual.

Tables showing the aggregate resources and liabilities of State banks, trust companies, and savings banks in each State, from which returns have been received from the State authorities, appear in the Appendix. A table is also there given showing by States the number of savings-bank depositors, and the average amount due to each in 1882 and 1883. The Comptroller has for the last eight years compiled the returns received by the Commissioner of Internal Revenue from the State and savings banks and private bankers for purposes of taxation, showing the average amount of their capital and deposit for each six months, and the amounts invested in United States bonds. The law requiring such returns to be made has not been repealed, but as the tax on capital and deposits ceased on November 30, 1882, it is not expected that such returns will hereafter be transmitted. The Comptroller must therefore depend exclusively for this information upon the returns to be received from the officers of the different States, and when such returns are required to be made they are as a rule promptly and courteously forwarded to this office in reply to his request.

The legislature of Missouri recently passed a law requiring all banks in the State to make reports in the month of December. With a view of rendering this system of reports more complete and effective than at present, the Comptroller prepared in the year 1876 the form of a bill, which is herewith presented; and it is respectfully suggested to members of Congress and State officers residing in those States where no returns are required that, if approved by them, they shall lend the weight of their influence to procure the enactment of a law, similar in form, by the legislatures of their respective States. It may be mentioned that a bill, substantially the same as that here presented, has been passed by the legislature of Ohio.

A BILL to provide for obtaining and publishing reports of banks, savings institutions, and trust companies organized under State laws.

Be it enacted, That each and every banking institution, organized under the laws of this State, shall make a report to the auditor of state, showing the condition thereof before the commencement of business on the first Monday in the months of January, April, July, and October of each year.

SEC. 2. That the auditor of state shall issue his requisition upon all banking institutions, for the reports required to be made by section 1 of this act, a convenient number of days prior to the first day of January, April, July, and October, in each year, and each banking institution shall, upon receipt thereof, immediately forward to the auditor a balanced report of its condition, verified by the oath or affirmation of one or more of the officers of such institution, and shall also publish such report in full at its own expense, in a newspaper issued at the place where the institution is located, or, if there be no newspaper in that place, then in the one nearest thereto; and any banking institution neglecting to make and transmit to the auditor of state, and publish, such reports, shall, after the expiration of five days from the receipt of the requisition therefor, be subject to a penalty of thirty dollars for each day's delay, which penalty may be collected by suit to be brought by the auditor of state, or by any creditor of the association, before any court of competent jurisdiction in the district wherein such banking institution is located; and all sums of money collected for penalties under this section shall be paid into the treasury of the State.

SEC. 3. That banks, trust companies, savings banks, and other banking institutions, having capital stock, shall report their resources and liabilities in the following form:

Report of the condition of The ——— ———, at ———, in the State of ———, before the commencement of business on the first Monday of ———, 187–.

DR. CR.

Resources.	Dollars.	Cts.	Liabilities.	Dollars.	Cts.
1. Loans on real estate			1. Capital stock paid in		
2. All other loans and discounts			2. Surplus fund		
3. Overdrafts			3. Undivided profits		
4. United States bonds on hand			4. State-bank notes outstanding		
5. State bonds			5. Dividends unpaid		
6. Other stocks, bonds, and mortgages			6. Individual deposits		
7. Due from other banks and bankers			7. Due to banks and bankers		
8. Real estate			8. Notes and bills rediscounted		
9. Furniture and fixtures			9. Bills payable		
10. Current expenses					
11. Premium on bonds					
12. Cash items					
13. Gold coin, $———; silver coin, $———					
14. National-bank notes					
15. United States notes					
Total			Total		

STATE OF ———,
County of ———.
Sworn to and subscribed before me this —— day of ——, 187–.
——— ———,
———.

I, ——— ———, ——— of The ——— ———, do solemnly swear that the above statement is true, to the best of my knowledge and belief.
——— ———,
Cashier.

SEC. 4. Savings banks and other banking institutions having no capital stock shall report their resources and liabilities in the following form:

Report of the condition of The ——— ———, at ———, in the State of ———, before the commencement of business on the first Monday of ———, 187–.

DR. CR.

Resources.	Dollars.	Cts.	Liabilities.	Dollars.	Cts.
1. Loans on real estate			1. Individual deposits		
2. Loans on United States and State stocks			2. Due to banks and bankers		
3. Loans on other stocks and bonds			3. Undivided profits		
4. All other loans			4. Other liabilities		
5. United States bonds on hand					
6. State bonds on hand					
7. Other stocks and bonds					
8. Real estate					
9. Furniture and fixtures					
10. Expenses					
11. Due from banks and bankers					
12. Specie					
13. National-bank and United States currency					
14. All other assets					
Total			Total		

STATE OF ———,
County of ———.
Sworn to and subscribed before me this —— day of ——, 187–.
——— ———,
———.

I, ——— ———, ——— of The ——— ———, do solemnly swear that the above statement is true, to the best of my knowledge and belief.
——— ———,
Cashier.

...such banks shall also furnish, with their reports, the following information: ... number of open accounts, and the rate per centum of dividends or interest on ... for the past year.

SEC. 3. That the auditor of state shall compile the reports received by him under ... and the tables so compiled shall be printed quarterly for distribution when ... printed, and shall be transmitted by him to the legislature at the beginning of each ... session thereof.

PRIVATE BANKERS.

In the Appendix will be found three comprehensive tables, of two pages each, giving, by geographical divisions, and by States, Territories, and principal cities, the number of State banks, savings banks, trust and loan companies, and private bankers of the country, for the present and three previous years, together with the amount of their capital and deposits, and the amount of their capital invested by them in United States bonds. The first official information of this character ever published in regard to the private bankers of the country was contained in a table in the Comptroller's report for 1880; and the law requiring these returns to be made having now been repealed, a similar table for the six months ending November 30, 1882, is given, which is the last table of this kind which can be presented. The following information in reference to the private bankers in sixteen of the principal cities has been compiled from the table in the Appendix for the six months' ending November 30, 1882:

Cities.	Number of banks.	Capital.	Deposits.	Invested in U. S. bonds.
Boston	61	$5,439,589	$3,621,863	$878,500
New York City	506	51,758,575	55,565,884	7,926,545
Albany	3	91,000	17,502	.....
Philadelphia	44	2,206,728	6,738,522	73,914
Pittsburgh	8	755,312	2,922,571	54,870
Baltimore	35	1,126,738	3,057,709	183,363
Washington	8	428,450	4,611,745	325,037
New Orleans	11	85,667	602	.....
Louisville	3	181,000	732,766	.....
Cincinnati	11	673,096	2,600,855	143,083
Cleveland	5	52,000	1,359,130	11,525
Chicago	22	1,473,408	10,660,525	153,249
Detroit	9	205,708	1,192,947	5,933
Milwaukee	4	160,000	2,433,026	3,614
Saint Louis	9	220,412	18,729	35,838
San Francisco	10	1,509,162	8,910,782	149,637
Totals	749	66,366,845	104,445,338	9,944,208

The total number of private bankers in the foregoing cities is 749, with an aggregate capital of $66,366,845, and aggregate deposits of $104,445,338; the average capital being $89,942, and the average deposits $139,446. About 68 per cent. of these private banks are located in New York City, representing more than three-fourths of the aggregate capital and over one-half of the aggregate deposits. In the city of New York the average amount of capital is $102,289 and deposits $109,814 for each private banker; and the bankers in that city also held $7,926,545 of United States bonds, or over one-half of the amount of such bonds held by all of the private bankers of the country.

The following table gives similar information for the thirty-four States and Territories, exclusive of the cities in the above table, having an amount of capital in excess of $100,000. In this table the number of private bankers is 2,611; the aggregate amount of capital $38,533,964,

and of deposits $181,270,757, the average capital being $14,758, and the average deposits $69,809.

States and Territories.	No. of banks.	Capital.	Deposits.	Invested in U. S. bonds.
Pennsylvania	189	$4,248,463	$24,174,291	$218,107
Iowa	321	4,200,584	14,580,124	210,551
Ohio	215	4,135,845	22,482,648	557,442
Illinois	337	3,654,230	24,501,579	640,121
Indiana	117	3,910,130	12,151,432	516,305
Texas	123	2,881,555	8,251,024	16,675
New York	166	1,742,889	15,556,556	446,321
Michigan	152	1,424,515	7,064,720	131,803
Kansas	161	1,323,412	5,595,708	36,685
Missouri	83	1,195,067	6,052,073	121,165
Nebraska	149	1,044,974	3,369,134	35,512
Minnesota	116	1,000,781	4,770,307	14,907
Oregon	17	868,709	2,752,552	270,000
Colorado	47	774,735	2,423,305	.....
Wisconsin	87	764,904	4,405,467	92,439
Georgia	29	632,177	1,117,969	6,000
Dakota	79	567,104	1,299,323	.....
Montana	17	525,727	1,540,824	.....
Alabama	22	514,500	1,530,913	.....
Washington	13	466,414	1,221,654	.....
Mississippi	11	423,615	949,095	.....
Rhode Island	7	406,539	577,740	7,486
Kentucky	22	395,386	2,244,248	28,167
Virginia	17	381,991	2,934,803	20,000
California	27	364,260	1,701,252	7,967
Connecticut	13	217,833	1,519,857	7,052
Utah	9	216,103	2,274,675	56,124
Wyoming	5	214,965	1,061,398	.....
Nevada	7	191,434	724,683	105,000
South Carolina	9	177,227	58,122	.....
Louisiana	4	158,536	55,907	.....
Florida	9	153,874	962,202	.....
Arkansas	16	118,568	249,633	2,500
Tennessee	5	111,591	344,952	19,500
Arizona	10	105,248	679,988	.....
Totals	2,611	38,533,964	181,270,757	3,568,419

The remaining eleven States and Territories enumerated in the following table contain 52 private bankers, with an aggregate capital of $375,424, and aggregate deposits of $3,241,483. Massachusetts has only three private bankers outside the city of Boston, with an aggregate capital of $68,333, and aggregate deposits of $572,673. Maryland has but three private bankers outside of the city of Baltimore. The State of Maine has nine private bankers, North Carolina but five, New Jersey four, Delaware and Vermont only one each. The average amount of capital held by each of these 52 private bankers is $7,220, and of deposits $62,336.

States and Territories.	Number of banks.	Capital.	Deposits.	Invested in U. S. bonds.
Maine	9	$83,343	$256,080	$10,137
Massachusetts	3	68,333	572,673	60,693
North Carolina	5	58,333	83,728	.....
West Virginia	3	40,000	1,158,647	14,325
Maryland	3	39,025	36,149	.....
Idaho	10	39,947	184,471	.....
New Mexico	13	25,417	920,006	.....
New Jersey	4	16,026	1,119	61
Delaware	1	5,000	8,519	.....
Vermont	1	.....	20,097	.....
New Hampshire	.....	.....	.....	.....
Total	52	375,424	3,241,483	85,216

The following table shows, by geographical divisions, the number of private bankers in the United States, with the aggregate amount of their capital, deposits, and investments in United States bonds, for the six months ending November 30, 1882.

Geographical divisions.	Number of banks.	Capital.	Deposits.	Invested in U. S. bonds.
New England States	94	$6,215,637	$6,568,310	$963,958
Middle States	967	62,418,206	112,690,656	9,227,728
Southern States	289	6,334,090	20,675,301	107,167
Western States and Territories	2,062	30,308,300	149,023,311	3,298,990
United States	3,412	105,276,233	288,957,578	13,597,843

The table below is a recapitulation of the foregoing, showing by groups the aggregates for the bankers in the sixteen principal cities in the thirty-three States and Territories having a private banking capital in excess of $100,000, and in the eleven remaining States and Territories, for the last year.

RECAPITULATION.

	Number of banks.	Capital.	Deposits.	Invested in U. S. bonds.
Principal cities	749	$66,366,845	$104,445,338	$9,944,208
Principal States and Territories	2,611	38,533,964	181,270,757	3,568,419
Remaining States and Territories	52	375,424	3,241,483	85,216
United States	3,412	105,276,233	288,957,578	13,597,843

TAXATION.

The act of March 3, 1883, repealed the law imposing a tax upon the capital and deposits of national banks, State banks, and private bankers, except such as was then due and payable. Some doubt arising as to the effect of this law, the question was referred to the Attorney-General, who, on May 18, 1883, decided that the tax upon the capital and deposits of State banks and private bankers ceased on November 1, 1882, and that upon the capital and deposits of the national banks on January 1, 1883. These were the dates of the last assessments under the laws taxing banking capital and deposits.

The only United States taxes now to be paid by banks are the 1 per cent. annual tax upon the circulation outstanding of national banks and the prohibitory tax of 10 per cent. upon state bank circulation paid out, as provided by section 3412 of the Revised Statutes.

The whole cost of the national banking system to the Government, from the date of its establishment in 1863 to the present time, has been $5,610,669. Up to January 1, 1883, the date upon which the tax on capital and deposits ceased, there had been collected on these two items alone from national banks the sum of $68,795,948.90. In addition the amount collected up to July 1, 1883, from the tax on circulation, which is still in force, amounted to $55,385,524.97, making an aggregate of $124,181,479.87 paid in taxes on capital, deposits, and circulation by the national banks up to July 1, 1883. The tax on circulation alone, paid for the last half of the fiscal year, amounted to $1,564,521.59. The

following table shows the total amount paid upon capital, circulation, and deposits up to July 1,1883:

Years.	On circulation.	On deposits.	On capital.	Total.
1863	$53,193 32	$95,911 87	$18,432 07	$167,537 26
1865	733,247 59	1,087,530 86	133,251 15	1,954,029 60
1866	2,106,785 30	2,633,102 77	406,947 74	5,146,835 81
1867	2,868,636 78	2,650,180 09	321,881 36	5,840,698 23
1868	2,946,343 07	2,564,143 44	306,781 67	5,817,268 18
1869	2,957,416 73	2,614,553 58	312,918 68	5,884,888 99
1870	2,949,744 13	2,614,767 61	375,962 26	5,940,474 00
1871	2,987,021 69	2,802,840 85	385,292 13	6,175,154 67
1872	3,193,570 03	3,120,984 37	389,356 27	6,703,910 67
1873	3,353,186 13	3,196,569 29	454,891 51	7,004,646 93
1874	3,404,483 11	3,209,967 72	469,048 02	7,083,498 85
1875	3,283,450 89	3,514,265 39	507,417 76	7,305,134 04
1876	3,091,795 76	3,505,129 64	632,296 16	7,229,221 56
1877	2,900,957 53	3,451,965 38	660,784 90	7,013,707 81
1878	2,948,047 08	3,273,111 74	560,296 83	6,781,455 65
1879	3,009,647 16	3,309,668 90	401,920 61	6,721,236 67
1880	3,153,635 63	4,058,710 61	379,424 19	7,591,770 43
1881	3,121,374 33	4,940,945 12	431,233 10	8,493,552 55
1882	3,190,981 98	5,521,927 47	437,774 90	9,150,684 35
1883	3,132,006 73	*2,773,790 46	*269,976 43	6,175,773 62
Aggregates	55,385,524 97	60,940,067 16	7,855,887 74	124,181,479 87

The following table exhibits the taxes upon the circulation, deposits, and capital of banks, other than national, collected by the Commissioner of Internal Revenue from 1864 to November 1, 1882, the date upon which the taxation of capital and deposits ceased.

Years.	On circulation.	On deposits.	On capital.	Totals.
1864	$2,056,996 30	$780,723 52	.....	$2,837,719 82
1865	1,993,661 84	2,043,841 08	$903,367 98	4,940,870 90
1866	990,278 11	2,099,635 83	374,074 11	3,463,988 05
1867	214,298 75	1,355,395 98	476,867 73	2,046,562 46
1868	28,669 88	1,438,512 77	399,562 90	1,866,745 55
1869	16,565 05	1,734,417 63	445,071 49	2,196,054 17
1870	15,419 94	2,177,576 46	827,087 21	3,020,083 61
1871	22,781 92	2,702,196 84	919,262 77	3,644,241 53
1872	8,919 82	3,643,251 71	976,057 61	4,628,229 14
1873	24,778 02	3,009,302 79	736,950 05	3,771,031 46
1874	16,738 26	3,453,544 26	916,878 15	3,387,160 67
1875	22,746 27	2,972,260 27	1,102,241 58	4,097,248 12
1876	17,947 67	2,999,530 75	989,219 61	4,006,698 03
1877	5,430 16	2,896,637 93	927,661 24	3,829,729 33
1878	1,118 72	2,593,687 29	897,225 84	3,492,031 85
1879	13,903 29	2,354,911 74	830,068 56	3,198,883 59
1880	28,773 37	2,510,775 43	811,436 48	3,350,985 28
1881	4,295 08	2,946,906 64	811,006 35	3,762,208 07
1882	4,285 77	4,096,102 45	1,153,070 25	5,253,458 47
1882†	.....	1,993,026 02	489,033 53	2,482,059 55
Aggregates	5,487,608 82	48,802,237 39	14,986,143 44	69,275,989 65

The shares of national banks are still subject to State taxation, and in previous reports tables exhibiting the average rates paid by national banks in the several States and Territories have been given for purposes of comparison and to show the total burden of taxation heretofore borne by the national banks. The national banks having been happily relieved of the United States tax, as has been repeatedly recommended by the Comptroller, it has been thought unnecessary to continue the collection of this information, which can only be obtained from separate returns to be made by each bank to this office.

* Six months to January 1, 1883.
† Six months to November 30, 1882.

UNITED STATES LEGAL-TENDER NOTES AND NATIONAL BANK CIRCULATION.

The acts of February 25, 1862, July 11, 1862, and March 3, 1863, each authorized the issue of 150 millions of dollars of legal tender notes, making an aggregate of 450 millions of dollars.

On February 3, 1864, the amount of such notes outstanding was $449,479,222, which was the highest amount outstanding at any one time. The act of June 30, 1864, provided that the total amount of United States notes issued, or to be issued, should not exceed 400 millions of dollars, and such additional sum, not exceeding 50 millions, as might be temporarily required for the redemption of temporary loans. By the act of June 20, 1874, the maximum amount was fixed at 382 millions. Section 3, act of January 14, 1875, authorized an increase of the circulation of national banks in accordance with existing law, without respect to the limit previously existing, and required the Secretary of the Treasury to retire legal-tender notes to an amount equal to eighty per cent. of the national-bank notes thereafter issued, until the amount of such legal-tender notes outstanding should be 300 millions, and no more. Under the operations of this act, $35,318,984 of legal-tender notes were retired, leaving the amount in circulation on May 31, 1878, the date of the repeal of the act, $346,681,016, which is the amount now outstanding.

In the following table are given the amount and kinds of the outstanding currency of the United States and of the national banks on January 1 of each year, from 1866 to 1883, and on November 1, 1883, to which is prefixed the amount on August 31, 1865, when the public debt reached its maximum:

Date.	United States issues.			Notes of national banks, including gold notes.	Aggregate.	Currency price of $100 gold.	Gold price of $100 currency.
	Legal-tender notes.	Old demand notes.	Fractional currency.				
Aug. 31, 1865...	$432,553,912	$402,965	$26,344,742	$176,213,955	$635,515,574	$144 25	$69 32
Jan. 1, 1866....	425,839,319	392,670	26,000,420	236,636,098	688,867,907	144 50	69 20
Jan. 1, 1867....	380,276,160	221,632	28,732,812	298,588,419	707,819,023	133 00	75 18
Jan. 1, 1868....	356,000,000	159,127	31,597,583	299,846,206	687,602,916	133 25	75 04
Jan. 1, 1869....	356,000,000	128,098	34,215,715	299,747,569	690,091,382	135 00	74 07
Jan. 1, 1870....	356,000,000	113,098	39,762,664	299,629,322	695,505,084	120 00	83 33
Jan. 1, 1871....	356,000,000	101,086	39,995,089	306,307,672	702,403,847	110 75	90 29
Jan. 1, 1872....	357,500,000	92,801	40,767,877	328,465,431	726,826,109	109 50	91 32
Jan. 1, 1873....	358,557,907	84,387	45,722,061	344,582,812	748,947,167	112 00	89 28
Jan. 1, 1874....	378,401,702	79,637	48,544,792	350,848,236	777,874,367	110 25	90 70
Jan. 1, 1875....	382,000,000	72,317	46,390,598	354,128,250	782,591,165	112 50	88 89
Jan. 1, 1876....	371,827,220	69,642	44,147,072	346,479,756	762,523,690	112 75	88 69
Jan. 1, 1877....	366,055,084	65,462	26,348,206	321,595,606	714,064,358	107 00	93 46
Jan. 1, 1878....	349,943,776	63,532	17,764,109	321,672,505	689,443,922	102 87	97 21
Jan. 1, 1879....	346,681,016	62,035	16,108,159	323,791,674	686,642,884	100 00	100 00
Jan. 1, 1880....	346,681,016	61,350	15,674,304	342,387,336	704,804,006	100 00	100 00
Jan. 1, 1881....	346,681,016	60,745	15,523,464	344,355,203	706,620,428	100 00	100 00
Jan. 1, 1882....	346,681,016	59,920	15,451,861	362,421,988	724,614,785	100 00	100 00
Jan. 1, 1883....	346,681,016	59,295	15,398,008	361,882,791	724,021,110	100 00	100 00
Nov. 1, 1883....	346,681,016	58,800	15,366,267	351,528,421	713,634,474	100 00	100 00

The act of June 20, 1874, provided that any national banking association might withdraw its circulating notes upon the deposit of lawful money with the Treasurer of the United States in sums of not less than $9,000. Since the passage of this act $154,424,641 of lawful money have been deposited with the Treasurer by the national banks for the purpose of reducing their circulation, and $120,156,646 of bank notes have been redeemed, destroyed, and retired.

In the following table* is shown, by States, the amount of circulation issued and retired during the year ending November 1, 1883, and the total amount issued and retired since June 20, 1874:

States and Territories.	Circulation issued.	Circulation retired.		Total.
		Act of June 20, 1874.	Liquidating banks.	
Maine	$45,009	$179,300	$94,386	$273,686
New Hampshire	67,500	39,300	113,124	152,424
Vermont	256,500	394,700	80,875	475,575
Massachusetts	861,720	2,999,110	427,281	3,426,391
Rhode Island	180,000	849,300	2,587	851,887
Connecticut	417,200	1,187,302	130,728	1,318,030
New York	1,284,220	3,949,239	813,232	4,762,471
New Jersey	372,450	762,723	242,590	1,005,313
Pennsylvania	1,339,300	2,735,000	671,642	3,406,642
Delaware	40,800	32,900	.....	32,900
Maryland	43,200	77,900	2,181	80,081
District of Columbia	.....	19,200	9,124	28,324
Virginia	173,250	92,800	40,825	133,625
West Virginia	13,500	52,200	10,270	62,470
North Carolina	45,000	208,800	27,880	236,680
South Carolina	.....	104,300	.....	104,300
Georgia	45,000	135,640	23,991	159,631
Florida	.....	.....	.....	.....
Alabama	22,500	73,000	16,611	89,611
Mississippi	72,000	.....	80	80
Louisiana	45,000	45,000	9,505	54,505
Texas	507,100	51,650	11,024	62,674
Arkansas	101,260	14,300	65	14,365
Kentucky	1,048,550	634,489	94,554	729,043
Tennessee	90,000	55,500	45,328	100,828
Missouri	432,990	313,901	102,076	415,077
Ohio	2,828,000	951,174	1,110,385	2,061,509
Indiana	791,080	657,550	604,713	1,262,263
Illinois	624,100	652,603	303,858	956,456
Michigan	287,990	464,752	408,939	873,691
Wisconsin	134,990	188,950	157,399	346,349
Iowa	470,590	236,250	212,467	448,717
Minnesota	260,090	183,786	113,496	297,282
Kansas	249,690	53,100	41,078	94,178
Nebraska	364 870	129,300	1,985	131,285
Nevada	.....	.....	115	115
Oregon	75,020	.....	.....	.....
Colorado	69,750	3,300	35,673	38,973
Utah	90,000	.....	1,772	1,772
Idaho	22,750	.....	.....	.....
Montana	98,980	11,250	27,030	38,280
Wyoming	.....	.....	.....	.....
New Mexico	.....	.....	.....	.....
Dakota	174,530	29,900	.....	29,900
Washington	155,250	56,400	.....	56,400
California, "currency"	281,240	61,000	.....	61,000
Arizona	11,240	.....	.....	.....
Total	14,510,200	18,685,969	5,988,814	24,674,783
Surrendered to this office and retired	.....	.....	.....	438,097
Total	14,510,200	18,685,969	5,988,814	25,112,880
From June 20, 1874, to October 31, 1882	145,192,155	99,461,185	20,695,460	120,156,645
Surrendered to this office between same dates	.....	.....	.....	12,959,713
Grand total	159,702,355	118,147,154	26,684,274	158,229,238

The amount of circulation issued to national banks for the year ending November 1, 1883, was $14,510,200, including $7,909,150 issued to banks organized during the year. The amount retired during the year was $25,112,880, and the actual decrease for the same period was therefore $10,602,680 and the total outstanding on November 1, was $351,264,803.

During the year ending November 1, 1883, lawful money to the amount of $22,349,420 was deposited with the Treasurer to retire circulation, of which amount $9,100,072 was deposited by banks in liquidation.

* *In this table gold notes* are excluded.

The amount previously deposited under the act of June 20, 1874, was $122,769,668; by banks in liquidation, $42,086,108, to which is to be added a balance of $3,813,675 remaining from deposits made by liquidating banks prior to the passage of that act. Deducting from the total the amount of circulating notes redeemed and destroyed without reissue ($155,262,564), there remained in the hands of the Treasurer, on November 1, 1883, $35,756,308 of lawful money for the redemption and retirement of bank circulation.

The portion of lawful money on deposit by insolvent banks, by banks in voluntary liquidation, and by banks reducing or retiring their circulation, on the first of each of the last five months, was as follows:

	July 1.	August 1.	September 1.	October 1.	November 1.
Insolvent banks	$966,426	$966,134	$942,024	$860,651	$850,434
Liquidating banks	15,335,347	14,799,959	14,150,375	13,586,763	13,220,336
Reducing under act of 1874	20,998,007	20,287,957	20,880,857	22,374,087	21,685,538
Totals	37,299,780	36,054,050	35,973,256	36,821,501	35,756,308

NATIONAL BANK AND LEGAL-TENDER NOTES BY DENOMINATIONS.

CIRCULATING NOTES OF THE BANK OF FRANCE AND IMPERIAL BANK OF GERMANY, BY DENOMINATIONS.

In accordance with law, no national-bank notes of a less denomination than five dollars have been issued since January 1, 1879, when the amount outstanding was $7,718,747. Since that date the amount of ones and twos issued by the banks has been reduced $6,791,747, leaving the amount now outstanding $927,000, and during the same period the legal-tender notes of these denominations have been increased $17,075,827. The total increase of the amount of ones and twos outstanding in national-bank and legal-tender notes is $10,284,080.

The following table exhibits by denominations the amount of national-bank and legal-tender notes outstanding on October 31, 1883, and the aggregate amounts of both kinds of notes at the same periods in 1881 and 1882:

Denominations.	1883.			1882.	1881.
	National-bank notes.	Legal-tender notes.	Aggregate.	Aggregate.	Aggregate.
Ones	$573,768	$30,211,497	$30,785,265	$28,068,944	$25,793,171
Twos	353,232	27,156,964	27,510,196	25,199,955	23,854,366
Fives	91,523,205	72,994,415	164,517,620	165,265,065	168,380,062
Tens	118,317,310	70,958,096	189,275,406	194,725,471	196,717,671
Twenties	83,084,160	59,298,309	142,382,469	151,117,959	152,322,503
Fifties	23,265,300	23,012,845	46,278,145	47,802,645	46,441,775
One hundreds	32,559,700	33,431,890	65,991,590	65,836,690	63,190,370
Five hundreds	898,000	14,997,500	15,895,500	15,624,500	14,949,500
One thousands	185,000	15,244,500	15,429,500	12,397,500	12,268,500
Five thousands	.....	255,000	255,000	2,395,000	2,430,000
Ten thousands	.....	120,000	120,000	230,000	260,000
Add for unredeemed fragments of national-bank notes	+19,761	.....	+19,761	+18,233	+16,586
Deduct for legal-tender notes destroyed in Chicago fire	.....	—1,000,000	—1,000,000	—1,000,000	—1,000,000
Total	350,779,436	346,681,016	697,460,452	707,681,962	705,622,504

The amount of one and two dollar notes outstanding is slightly over one-fourth of 1 per cent. of the whole circulation of the banks; the fives constitute 26.1 per cent., the tens 33.7 per cent., the twenties 23.7 per cent., and the fifties and larger notes 16.2 per cent. of the entire circulation.

Of the entire amount of national-bank and legal-tender notes outstanding, about 4.4 per cent. consists of one and two dollar notes; more than 31 per cent. of ones, twos, and fives; 59 per cent. is in notes of a less denomination than twenty dollars, and about 80 per cent. is in notes of a lower denomination than fifty dollars. Of the entire issue, about 20 per cent. is in denominations of fifties, one hundreds, five hundreds, and one thousands. There are outstanding 51 legal-tender notes of the denomination of five thousand, and 12 notes of the denomination of ten thousand.

The following table * exhibits by denominations the circulation of the Imperial Bank of Germany on January 1, 1883, in thalers and marks, which are here converted into our currency:

Thalers.				Marks.			
Number of notes.	Denominations.	Value of each note in dollars.	Amount in dollars (Thaler = 75 cents.)	Number of notes.	Denominations.	Value of each note in dollars.	Amount in dollars (Mark = 25 cents.)
80	500 thalers.	375 00	30,000	253,684½	1,000 marks.	250	63,421,125
2,130	100 thalers.	75 00	159,750	158,199	500 marks.	125	19,774,875
1,667½	50 thalers.	37 50	62,531	4,964,349	100 marks.	25	124,108,725
8,492	25 thalers.	18 75	159,225	.....	.....	.....	.....
8,848½	10 thalers.	7 50	66,363	.....	.....	.....	.....
21,218	.....	.....	477,869	5,376,232½	.....	.....	207,314,725

The circulation of the Imperial Bank of Germany on January 1, 1882, was $214,359,750, showing a decrease of $7,045,015 during the following year; on January 1, 1879, the circulation was $165,933,942, showing an increase during the four years preceding January 1, 1883, of $41,380,793.

The following table † gives the circulation of the Bank of France and its branches, with the number of notes and the denominations in francs and in dollars on January 25, 1883:

Number of notes.	Denominations. Francs.	Value of each note in dollars.	Amount in francs.	Amount in dollars (Franc = 20 cents.)
5	5,000	1,000	25,000	5,000
1,263,286	1,000	200	1,263,286,000	252,657,200
624,757	500	100	312,378,500	62,475,700
2,752	200	40	550,400	110,080
10,812,234	100	20	1,081,223,400	216,244,680
4,725,149	50	10	236,257,450	47,251,490
22,864	25	5	571,600	114,320
196,473	20	4	3,929,460	785,892
176,624	5	1	883,120	176,624
1,212	Forms out of date.	.....	423,200	84,640
17,825,356	.....	.....	2,899,528,130	579,905,626

The amount of circulation of the Bank of France on January 26, 1882, was 2,852,316,675 francs, or, say, $570,463,335, showing an increase

* London Bankers' Magazine, August, 1883, p. 756.
† London Bankers' Magazine, September, 1883, p. 878.

The total population of New England, according to the census of 1880, was 4,010,529, and the number of open-deposit accounts of the savings banks in the year 1883 is 1,368,997, which is equal to 34.1 accounts to each one hundred of the entire population. The average amount of each account is $331.55, and if the total deposits were divided among the entire population the average sum of $113.17 could be given to each individual.

The deposits of the savings banks in the State of New York were $412,147,213, while the population is 5,082,871, showing that an equal distribution of the savings-banks deposits among the entire population of the State would give $81.08 to each individual.

Tables showing the aggregate resources and liabilities of State banks, trust companies, and savings banks in each State, from which returns have been received from the State authorities, appear in the Appendix. A table is also there given showing by States the number of savings-bank depositors, and the average amount due to each in 1882 and 1883. The Comptroller has for the last eight years compiled the returns received by the Commissioner of Internal Revenue from the State and savings banks and private bankers for purposes of taxation, showing the average amount of their capital and deposit for each six months, and the amounts invested in United States bonds. The law requiring such returns to be made has not been repealed, but as the tax on capital and deposits ceased on November 30, 1882, it is not expected that such returns will hereafter be transmitted. The Comptroller must therefore depend exclusively for this information upon the returns to be received from the officers of the different States, and when such returns are required to be made they are as a rule promptly and courteously forwarded to this office in reply to his request.

The legislature of Missouri recently passed a law requiring all banks in the State to make reports in the month of December. With a view of rendering this system of reports more complete and effective than at present, the Comptroller prepared in the year 1876 the form of a bill, which is herewith presented; and it is respectfully suggested to members of Congress and State officers residing in those States where no returns are required that, if approved by them, they shall lend the weight of their influence to procure the enactment of a law, similar in form, by the legislatures of their respective States. It may be mentioned that a bill, substantially the same as that here presented, has been passed by the legislature of Ohio.

A BILL to provide for obtaining and publishing reports of banks, savings institutions, and trust companies organized under State laws.

Be it enacted, That each and every banking institution, organized under the laws of this State, shall make a report to the auditor of state, showing the condition thereof before the commencement of business on the first Monday in the months of January, April, July, and October of each year.

SEC. 2. That the auditor of state shall issue his requisition upon all banking institutions, for the reports required to be made by section 1 of this act, a convenient number of days prior to the first day of January, April, July, and October, in each year, and each banking institution shall, upon receipt thereof, immediately forward to the auditor a balanced report of its condition, verified by the oath or affirmation of one or more of the officers of such institution, and shall also publish such report in full at its own expense, in a newspaper issued at the place where the institution is located, or, if there be no newspaper in that place, then in the one nearest thereto; and any banking institution neglecting to make and transmit to the auditor of state, and publish, such reports, shall, after the expiration of five days from the receipt of the requisition therefor, be subject to a penalty of thirty dollars for each day's delay, which penalty may be collected by suit to be brought by the auditor of state, or by any creditor of the association, before any court of competent jurisdiction in the district wherein such banking institution is located; and all sums of money collected for penalties under this section shall be paid into the treasury of the State.

SEC. 3. That banks, trust companies, savings banks, and other banking institutions, having capital stock, shall report their resources and liabilities in the following form:

Report of the condition of The ——— ———, at ———, in the State of ———, before the commencement of business on the first Monday of ———, 187–.

DR. CR.

Resources.	Dollars.	Cts.	Liabilities.	Dollars.	Cts.
1. Loans on real estate			1. Capital stock paid in		
2. All other loans and discounts			2. Surplus fund		
3. Overdrafts			3. Undivided profits		
4. United States bonds on hand			4. State-bank notes outstanding		
5. State bonds			5. Dividends unpaid		
6. Other stocks, bonds, and mortgages			6. Individual deposits		
7. Due from other banks and bankers			7. Due to banks and bankers		
8. Real estate			8. Notes and bills rediscounted		
9. Furniture and fixtures			9. Bills payable		
10. Current expenses					
11. Premium on bonds					
12. Cash items					
13. Gold coin, $——; silver coin, $——					
14. National-bank notes					
15. United States notes					
Total			Total		

STATE OF ———,
County of ———.
Sworn to and subscribed before me this —— day of ——, 187–.

——— ———,
———.

I, ——— ———, ——— of The ——— ———, do solemnly swear that the above statement is true, to the best of my knowledge and belief.

——— ———,
Cashier.

SEC. 4. Savings banks and other banking institutions having no capital stock shall report their resources and liabilities in the following form:

Report of the condition of The ——— ———, at ———, in the State of ———, before the commencement of business on the first Monday of ———, 187–.

DR. CR.

Resources.	Dollars.	Cts.	Liabilities.	Dollars.	Cts.
1. Loans on real estate			1. Individual deposits		
2. Loans on United States and State stocks			2. Due to banks and bankers		
3. Loans on other stocks and bonds			3. Undivided profits		
4. All other loans			4. Other liabilities		
5. United States bonds on hand					
6. State bonds on hand					
7. Other stocks and bonds					
8. Real estate					
9. Furniture and fixtures					
10. Expenses					
11. Due from banks and bankers					
12. Specie					
13. National-bank and United States currency					
14. All other assets					
Total			Total		

STATE OF ———,
County of ———.
Sworn to and subscribed before me this —— day of ——, 187–.

——— ———,
———.

I, ——— ———, ——— of The ——— ———, do solemnly swear that the above statement is true, to the best of my knowledge and belief.

——— ———,
Cashier.

And such banks shall also furnish, with their reports, the following information: The number of open accounts, and the rate per centum of dividends or interest on deposits, for the past year.

SEC. 5. That the auditor of state shall compile the reports received by him under this act, and the tables so compiled shall be printed quarterly for distribution when prepared, and shall be transmitted by him to the legislature at the beginning of each session thereof.

PRIVATE BANKERS.

In the Appendix will be found three comprehensive tables, of two pages each, giving, by geographical divisions, and by States, Territories, and principal cities, the number of State banks, savings banks, trust and loan companies, and private bankers of the country, for the present and three previous years, together with the amount of their capital and deposits, and the amount of their capital invested by them in United States bonds. The first official information of this character ever published in regard to the private bankers of the country was contained in a table in the Comptroller's report for 1880; and the law requiring these returns to be made having now been repealed, a similar table for the six months ending November 30, 1882, is given, which is the last table of this kind which can be presented. The following information in reference to the private bankers in sixteen of the principal cities has been compiled from the table in the Appendix for the six months ending November 30, 1882:

Cities.	Number of banks.	Capital.	Deposits.	Invested in U. S. bonds.
Boston	61	$5,439,589	$3,621,863	$878,590
New York City	506	51,758,575	55,565,884	7,926,545
Albany	3	91,000	17,592	.....
Philadelphia	44	2,206,728	6,738,522	73,914
Pittsburgh	8	755,312	2,922,571	54,879
Baltimore	35	1,126,738	3,057,709	183,365
Washington	8	428,450	4,611,745	324,037
New Orleans	11	85,667	602	.....
Louisville	3	181,000	732,766	.....
Cincinnati	11	673,096	2,600,835	143,082
Cleveland	5	52,000	1,359,130	11,523
Chicago	22	1,473,408	10,660,525	153,249
Detroit	9	205,708	1,192,947	5,933
Milwaukee	4	160,000	2,433,026	3,614
Saint Louis	9	220,412	18,729	35,838
San Francisco	10	1,509,162	8,910,782	149,637
Totals	749	66,360,845	104,445,338	9,944,209

The total number of private bankers in the foregoing cities is 749, with an aggregate capital of $66,366,845, and aggregate deposits of $104,445,338; the average capital being $89,942, and the average deposits $139,446. About 68 per cent. of these private banks are located in New York City, representing more than three-fourths of the aggregate capital and over one-half of the aggregate deposits. In the city of New York the average amount of capital is $102,289 and deposits $109,814 for each private banker; and the bankers in that city also held $7,926,545 of United States bonds, or over one-half of the amount of such bonds held by all of the private bankers of the country.

The following table gives similar information for the thirty-four States and Territories, exclusive of the cities in the above table, having an amount of capital in excess of $100,000. In this table the number of private bankers is 2,611; the aggregate amount of capital $38,533,964,

and of deposits $181,270,757, the average capital being $14,758, and the average deposits $69,809.

States and Territories.	No. of banks.	Capital.	Deposits.	Invested in U. S. bonds.
Pennsylvania	189	$4,248,463	$24,174,291	$218,107
Iowa	321	4,200,584	14,580,124	210,551
Ohio	215	4,135,845	22,482,648	557,442
Illinois	337	3,654,239	24,591,579	640,121
Indiana	117	3,910,130	12,151,432	516,305
Texas	123	2,881,555	8,251,624	16,675
New York	166	1,742,889	15,556,555	446,821
Michigan	152	1,424,515	7,064,720	131,803
Kansas	161	1,323,412	5,505,708	36,685
Missouri	83	1,195,067	6,052,073	121,165
Nebraska	149	1,044,974	3,369,134	35,512
Minnesota	116	1,000,781	4,770,307	14,997
Oregon	17	868,700	2,752,552	270,000
Colorado	47	774,735	2,423,305	.....
Wisconsin	87	764,904	4,405,467	92,439
Georgia	29	632,177	1,117,969	6,000
Dakota	79	567,104	1,299,323	.....
Montana	17	525,727	1,540,824	.....
Alabama	22	514,500	1,530,913	.....
Washington	13	466,414	1,221,654	.....
Mississippi	11	423,615	949,095	.....
Rhode Island	7	406,539	577,740	7,486
Kentucky	22	395,386	2,244,248	28,167
Virginia	17	381,991	2,934,803	20,000
California	27	364,260	1,701,252	7,967
Connecticut	13	217,833	1,519,857	7,052
Utah	9	216,103	2,274,675	56,124
Wyoming	5	214,965	1,061,398	.....
Nevada	7	191,434	724,683	105,000
South Carolina	9	177,297	58,122	.....
Louisiana	4	158,536	55,907	.....
Florida	9	153,874	962,202	.....
Arkansas	16	118,568	249,633	2,500
Tennessee	5	111,591	344,952	19,500
Arizona	10	105,248	679,988	.....
Totals	2,611	38,533,964	181,270,757	3,568,419

The remaining eleven States and Territories enumerated in the following table contain 52 private bankers, with an aggregate capital of $375,424, and aggregate deposits of $3,241,483. Massachusetts has only three private bankers outside the city of Boston, with an aggregate capital of $68,333, and aggregate deposits of $572,673. Maryland has but three private bankers outside of the city of Baltimore. The State of Maine has nine private bankers, North Carolina but five, New Jersey four, Delaware and Vermont only one each. The average amount of capital held by each of these 52 private bankers is $7,220, and of deposits $62,336.

States and Territories.	Number of banks.	Capital.	Deposits.	Invested in U. S. bonds.
Maine	9	$83,343	$256,080	$10,137
Massachusetts	3	68,333	572,673	60,093
North Carolina	5	58,333	83,728	.....
West Virginia	3	40,000	1,158,647	14,325
Maryland	3	39,025	36,149	.....
Idaho	10	39,947	184,471	.....
New Mexico	13	25,417	920,000	.....
New Jersey	4	16,026	1,119	61
Delaware	1	5,000	8,519	.....
Vermont	1	.....	20,097	.....
New Hampshire	.....	.....	.....	.....
Total	52	375,424	3,241,483	85,216

REPORT OF THE DIRECTOR OF THE MINT.

TREASURY DEPARTMENT,
BUREAU OF THE MINT,
October 20, 1883.

SIR: In obedience to the requirements of the Revised Statutes, I have the honor to submit my fifth annual report showing the operations of the mints and assay offices of the United States during the fiscal year ended June 30, 1883, and the present condition of the coinage and metallic circulation, being the eleventh annual report of the Director of the Mint since the creation of this Bureau.

The general work of the year in the receipt of gold bullion fell off from that of the previous year, but the silver bullion received for manufacture into bars and procured for coinage slightly increased.

The imports of foreign coin and bullion were about $20,000,000 less than during the previous year, and occasioned the diminished receipts at the mints.

Of domestic bullion there was an increase of $1,180,000 over that deposited in 1882. The bullion requiring to be parted or refined contained less gold but nearly a half million dollars more silver than similar bullion deposited during the preceding year. Besides the coinage of gold for depositors, which has been continued at all the mints, and of the regular monthly coinage of silver dollars, as required by the act of February 28, 1878, it was found necessary to coin, for the convenience of the public, a considerable amount of dimes and also of minor coins. In supplying the latter the Philadelphia Mint has been taxed to its full capacity.

The mints and assay offices, except those at Saint Louis and Charlotte, were visited during or shortly subsequent to the close of the fiscal year, and their accounts and methods of conducting business, and recording and reporting official transactions, were examined and generally found satisfactory, although some of the mints, particularly those at Philadelphia and Denver, are hampered and their efficiency impaired by the want of sufficient facilities for operating upon the bullion received and for performing the work required of them by the demands of the public.

DEPOSITS AND PURCHASES.

The deposits of gold bullion and coin were $46,347,106.05, and of silver, including purchases, $36,869,834.65. In addition to these amounts $2,798,453.11 in gold and $1,742,760.24 in silver, which had been deposited and made into bars at one institution, were re-deposited for coin fine bars, or on purchase account at another, making the whole amounts received and operated upon $49,145,559.16 of gold and $38,612,594.89 of silver, a total of $87,758,154.05.

COINAGE.

The coinage executed during the year was as follows:

Description.	Pieces.	Value.
Gold	2,407,022	$35,936,927 50
Silver	35,308,076	28,835,470 15
Minor	60,951,526	1,428,307 16
Total	98,666,624	66,200,704 81

Although the value of the coinage was over fifty-one and a half millions less than in the preceding year, the number of pieces struck was greater by about eleven and a half millions than in any fiscal year since the organization of the Mint Bureau.

Of $28,163,945 gold coinage executed at the mints at San Francisco and Carson, $27,513,220 were coined into double eagles, that denomination being desired by depositors of bullion at those mints, and of the gold coinage, $7,729,982.50, at the mint at Philadelphia, $7,693,425 were in eagles and half eagles.

The coinage of silver dollars was $28,111,119. On account of the slight demand for this coin in the Pacific States and Territories and of the large amount, over $40,000,000, held in the mint and Assistant Treasurer's office at San Francisco, it was deemed advisable to execute as large a portion of the silver dollar coinage as possible at the mints at Philadelphia and New Orleans. These mints, therefore, coined $19,641,119, and those at San Francisco and Carson $8,470,000.

The number of dimes in the offices of the Treasurer and Assistant Treasurers of the United States having become reduced to 1,844,030 pieces, which would not be sufficient for any considerable length of time to supply the demand for coins of that denomination, the superintendent of the Philadelphia Mint was authorized, on the 25th day of August, 1882, to resume their coinage and at the close of the year had struck $717,511.90, and delivered to the public coins to the value of $697,816.90.

For both the one-cent bronze and five-cent copper nickel coins the demand from the public continued to be pressing. The amount of the latter held in the Treasury had become reduced from 23,685,059 pieces in September, 1879, to 1,598,331 pieces on the first of December, 1882, and was less than the requirements of the public upon the mint for this coin for a single month.

It seeming probable that the coinage of a considerable number of these coins would be required, the superintendent of the Philadelphia Mint believed it to be a favorable opportunity for issuing a coin more artistic in its appearance and execution, having the same weight but an increased diameter, and more nearly complying, as to devices and legends, with the requirements of the law.

Specimen coins were accordingly prepared by him and submitted to the Director of the Mint and the Secretary of the Treasury, and on the 8th of January, 1883, he was authorized to issue coins of the weight, size, and having the devices proposed.

During the year 20,455,488 pieces of the five-cent coin, valued at $1,022,774.40 were struck, and of bronze cents 40,467,400 pieces, of the nominal value of $404,674.19. The metal for the last-named coin is purchased in the form of planchets or blanks ready for striking, thus relieving the Mint of the labor of handling the metal in the various operations of melting, rolling, punching, etc., and enabling it to execute a much greater amount of coin.

BARS.

During the past year gold bars were manufactured to the value of $18,269,205.26, and silver bars $8,050,602.10. The principal part of this work was done at the assay office at New York, which prepared for depositors, fine, standard and sterling gold bars to the amount of $13,791,053.36, and of bars for transmission to the Mint $2,195,293.37.

Of fine silver bars $6,433,097.08 were paid to depositors at the same office. The total value of all the gold and silver bars made during the year was $26,319,807.36.

The assay office at New York held the following amounts of gold and silver bars at the beginning and close of the fiscal year:

Bars at the New York assay office.	Gold.	Silver.
July 1, 1882:	*Standard ozs.*	*Standard ozs.*
Fine bars	126,784.468	189,706.45
Mint bars	858,356.956	130,796.65
Standard bars	.....	11,191.53
June 30, 1883:		
Fine bars	275,849.301	266,030.36
Standard bars	12,876.284	1,585.92
Sterling bars	77,066.236	.....
Mint bars	1,019,821.037	95,944.11

BARS EXCHANGED FOR COIN.

Under the provisions of the act of May 26, 1882, which authorized the exchange of gold bars at the coinage mints and New York Assay Office for gold coin, the assay office at New York received gold coin and paid in exchange gold bars to the value of $5,173,965.22, and the mint at Philadelphia $187,541.07.

Of the bars exchanged at Philadelphia, the whole amount was for manufacturing purposes, and of those exchanged by the New York Assay Office $3,227,710 were for export, and $1,946,255 for use in the arts and manufactures.

PARTING AND REFINING.

The amount of bullion parted and refined at the mints and assay-office at New York was nearly a half million dollars in excess of that operated upon during the previous year, and resulted from increased receipts at the mint at Carson.

The following table shows the gross ounces of bullion parted by the use of acid at those institutions which are provided with acid refineries and the ounces of standard gold and silver resulting from the operation:

OUNCES.

Mint or assay office.	Gross.	Standard gold.	Standard silver.
Philadelphia	469,800.57	100,420.940	396,114.63
San Francisco	6,068,881.60	484,810.514	5,619,934.05
Carson	1,134,781.18	83,818.630	1,108,070.14
New Orleans	10,022.84	3,239.227	5,436.92
New York	5,037,228.00	526,628.000	4,286,065.00
Total	12,720,714.28	1,198,917.311	11,415,620.74

VALUE.

Mint or assay office.	Gold.	Silver.	Total.
Philadelphia	$1,868,206 55	$460,933 38	$2,329,229 93
San Francisco	9,019,730 49	6,539,559 62	15,559,290 11
Carson	1,559,416 37	1,289,390 71	2,848,807 08
New Orleans	60,264 69	6,326 60	66,591 29
New York	9,797,730 24	4,987,421 09	14,785,151 33
Total	22,305,438 34	13,283,631 40	35,589,069 74

DIES AND MEDALS.

Coinage and medal dies are manufactured only at the mint at Philadelphia, and those required for coinage at the other mints are supplied from that mint. During the year 2,348 dies were made, of which 138 were for the coinage of gold, 460 for silver, 1,695 for minor coins, 40 for proof coins, and 15 for medals.

The number of fine gold medals sold was 86, of silver 1,016, and of bronze 5,787, a total of 6,889; and of proof sets of gold 36, of silver 1,048, and of the minor coins 4,946.

SILVER PURCHASES AND COINAGE.

On the 1st of July, 1882, the coinage mints had on hand of silver bullion belonging to the Government, and excluding silver bullion due depositors, 2,703,222.60 ounces at standard fineness, costing $2,791,763.04. The purchases and deliveries during the fiscal year 1883 of similar bullion for the coinage of standard dollars, including bullion parted, retained in payment of charges, and surplus returned by officers on settlement, were 25,432,490.27 ounces, at a cost of $25,577,327.58, and were received at the several mints as follows:

Mint at which delivered.	Standard ounces.	Value.
Philadelphia	10,480,110.92	$10,567,302 52
San Francisco	6,515,900.28	6,552,439 57
New Orleans	7,330,304.60	7,360,513 93
Carson	1,097,174.47	1,097,071 56
Total	25,432,490.27	25,577,327 58

The average cost was $1.0056949 per ounce of standard fineness and $1.11743885 per ounce fine. The average London price for silver, 925 fine (British standard), during the year was $51\frac{23}{100}$ pence, rating exchange at par ($4.8665) equal to $1.11826 per ounce fine, and the average New York price was $1.11889 per ounce fine.

Of the silver bullion on hand at the commencement of and procured during the year for coinage under the act of February 28, 1878, 24,157,992.92 standard ounces costing $24,409,787.22 were consumed in the coinage of standard dollars, and 40,839.85 standard ounces costing $40,510.35 were wasted by operative officers and sold in sweeps, leaving a balance on hand June 30, 1883, available for silver dollar coinage of 3,936,880.10 standard ounces costing $3,918,793.05.

An appropriation having been made by Congress to reimburse the Treasurer for the loss on the recoinage of uncurrent and mutilated silver coin in the Treasury, on the 25th of August, 1882, the Secretary of the Treasury directed the transfer of the silver three-cent pieces then in the Treasury to the mint at Philadelphia and their coinage into dimes. Subsequently the Secretary ordered the other denominations of uncurrent and mutilated silver coins to be transferred from the Treasury to the mint for similar coinage. The amount during the fiscal year was 470,201.28 standard ounces, which was carried in the accounts at its subsidiary coining value, $585,009.38.

Of the bullion resulting from the melting of these coins 468,137.76 ounces, valued at $582,442, were used in coining dimes, leaving a balance on hand at the Philadelphia Mint of silver transferred for recoinage

2,063.52 standard ounces, valued at $2,567.38. There were also procured from the New York Assay Office by transfer to the Philadelphia Mint, for the coinage of fractional silver under the provisions of section 3526 of the Revised Statutes, 130,796.65 standard ounces, valued at $152,199.74. This silver was a part of the accumulations in previous years from the retention of silver bullion in payment of charges, and of fractions contained in bullion due but not delivered to depositors, the value being paid for in coin.

The Philadelphia Mint also, with my approval, applied and carried into the same account of silver procured for the subsidiary coinage the bullion resulting from coins melted at the annual assay 359.39 standard ounces, rated at its coining value $447.14, making a total of 131,156.64 standard ounces, costing the Mint $152,646.88, of which 114,059.47 standard ounces, costing $132,748.91, were consumed in the coinage of dimes, leaving a balance of 17,096.57 standard ounces, costing $19,897.97.

The total balance of silver bullion on hand at the mints June 30, 1883 was composed as follows:

Silver bullion.	Standard ounces.	Cost.
For standard dollar coinage	3,936,880.19	$3,918,793 05
For subsidiary silver coinage	2,063.52	2,567 38
For recoinage	17,096.57	19,897 97
Total	3,956,040.19	3,941,258 40

The deliveries of silver bullion for the standard dollar coinage have averaged over $2,000,000 worth per month, and have fallen below that amount but twice in the year. These deficiencies were occasioned by failures to deliver during the month the silver purchased.

As sellers of silver bullion are allowed ten days from the date of sale within which to make delivery, it is practically impossible to secure in every month $2,000,000 worth without the liability of largely exceeding that limit in some subsequent months and that average for the year.

The statement showing the amount purchased during the year and its cost gives an average purchase of $2,131,444 worth per month.

A statement in continuation of a similar table contained in my last report will be found in the appendix giving the number of ounces at standard and the cost of the silver bullion purchased and received at the Mint for the coinage of silver dollars from January 1, 1882, to June 30, 1883. During that period 36,227,336.16 standard ounces, costing $36,692,627.92, were purchased and received, and 41,874,919 silver dollars coined. This and the previous statement show the purchase of 128,782,187.25 standard ounces, costing $131,811,776.28, and the coinage of 147,255,899 silver dollars. The table in the report for 1882 includes not only bullion purchased but also parted and received for charges at the New York Assay Office, of which, however, the partings and receipts for charges for the calendar year 1881 still remain in that office.

The tale value and denominations of the uncurrent silver coins transferred for re-coinage during the year were:

Three-cent pieces	$88,808 16
Five-cent pieces	326,507 55
Twenty-cent pieces	100,016 00
Mixed coins	98,069 04
Foreign coins	5,798 15
Total	619,198 90

The loss upon which by recoinage was $34,698.36.

PROFITS ON SILVER COINAGE AND THEIR DISPOSITION.

The balance to the credit of the silver-profit fund on hand June 30, 1882, was $807,075.79; the profits on the coinage of standard dollars during the year were $3,701,331.78; on fractional silver, $9,160.24; and the Adams Express Company refunded for overpayments prior to 1879 on transportation of silver coin $9,178.81, making the total to the credit of the silver-profit fund $4,526,746.45. From this fund $73,189.45 were paid during the year for the expenses incurred in transmitting silver coin, and $23,996.45 were paid for wastage and bullion sold in sweeps. The quarterly accounts of the mints show the deposit during the year of $3,150,964.06 in the Treasury, and a balance in the mints on the 30th of June, 1883, of $1,278,596.59; of this amount, however, a deposit was made June 27, 1883, with the Treasurer of the United States and certificate issued in favor of the superintendent of the San Francisco Mint for $250,839.86, reducing the balance to be accounted for by that mint from $451,104.40 to $200,264.54; but notice did not reach the San Francisco Mint until after the 30th of June, 1883, and the amount was not entered in the accounts of that mint as deposited until the succeeding quarter.

The remaining balance, $1,027,756.73, has been deposited in the Treasury, as follows:

Mint.	Date of deposit.	Balance.
Carson	September 15, 1883	$80, 889 73
Philadelphia	September 29, 1883	422, 757 94
San Francisco	September 29, 1883	200, 264 54
New Orleans	October 5, 1883	323, 844 52
		1, 027, 756 73

As inquiries had been made in relation to the profits on the coinage of silver since the passage of the act of February 28, 1878, authorizing the coinage of the standard silver dollar, and as the statements published in the previous annual reports would not show the actual profits on the coinage of the respective years, the profits having been computed under former instructions and regulations upon the silver purchased, and not upon that coined, although well satisfied that all of the profits had been properly accounted for, I caused an examination to be made of the quarterly accounts of the coinage mints from the 1st of July, 1878, to the 30th of June, 1881, for the purpose of ascertaining the exact amount of silver purchased and acquired, available for coinage, the profits on the actual coinage to that date, and their disposition. The result of this examination was embodied in the series of statements forwarded to you on the 22d of December, 1881, with a request that you would have them verified.

In accordance with your instructions, Mr. William Sherer, of the Assistant Treasurer's office at New York, made an examination of the silver-profit fund accounts of the several coinage mints and of the silver-bullion and silver-coin accounts for the fiscal years 1879, 1880, and 1881, the result of which was an exact verification of the figures presented in the statements which I submitted, showing, as Mr. Sherer states in his report of April 28, 1882, "that the silver profits had been properly accounted for."

I have thought it proper to carry this examination up to the close of the fiscal year 1883, for the purpose of showing, in a succinct form, the amount of bullion acquired, the profits which have been realized, and

their disposition. The results have been consolidated with the statements covering the three previous years, which were verified by Mr. Sherer's examination, and are embodied in two statements published in the appendix, one showing the balance of silver bullion available for coinage on hand at the coinage mints on the first of July, 1878, the amount purchased and acquired since, and its cost, and the disposition of the same; the other showing the profits on the coinage of silver for the same period and their disposition pursuant to law.

From the first statement it will be seen that there were on hand at the coinage mints on the first of July, 1878, of silver not due depositors for bars, 3,440,072.69 standard ounces; that there have been purchased, parted from gold, acquired in the payment of charges, &c., including transfers from the New York Assay Office, since that time, 120,007,407.41 ounces, making a total of 123,447,480.10 ounces; of which 119,206,224.53 standard ounces have been used in coinage, 304,375.47 ounces have been wasted by the operative officers and sold in sweeps, leaving a balance at the coinage mints on the 30th of June, 1883, of 3,936,880.10 ounces of silver bullion, which was weighed by representatives of this office at the time, and that amount found to be actually on hand, as will be seen from their reports on file in this office.

The profits on the coinage of silver on hand at the coinage mints on the first of July, 1878, amounted to $424,725.47; the profits on the coinage from that date to the 30th of June, 1883, were $16,903,589.71, which, adding the amount of $9,237.54, refunded by the Adams Express Company for overcharges in their bills for shipping silver coin, and the additional sum of $4,560.30, carried to the credit of that fund from profits arising on adjustments of silver values and surplus bullion, make a grand total of silver profits to be accounted for of $17,342,113.02, of which $358,399.07 have been paid for expenses of distributing the coin, $51,925.69 for the loss on silver in sweeps sold, $71,429.18 for wastages by the operative officers, and $48.86 for losses by recoinage, and prior to June 30, 1883, $15,581,713.63 had been deposited in the Treasury of the United States and entered in the quarterly mint accounts, leaving a balance in the coinage mints of $1,278,596.59, all of which has been covered into the Treasury, making the total amount of silver profits for the five years thus deposited $16,860,310.22, as shown by the books of the Treasury Department.

The statements referred to do not in any way relate to bullion at the New York Assay Office, or any institution other than the four coinage mints.

Since the passage of the act, in 1878, requiring the monthly purchase of not less than two million dollars worth of silver bullion, and its coinage into silver dollars, $154,370,899 had been coined prior to October, 1883. That this, with the eighty-one millions of fractional silver coin in the country, a total of $235,000,000, is in excess of the requirements of the country for silver circulation is apparent. from the large amount of these coins in the vaults of the Treasury not represented by outstanding certificates and not required to be held for their payment, namely, over 39,000,000 silver dollars, and nearly $27,000,000 of fractional silver coin, a total of $66,000,000.

My views in regard to the policy of further continuing the coinage of silver dollars were expressed in my report two years ago, and remain unchanged. While believing that the equal coinage of both metals by all nations is desirable in order to give greater stability to the values of commodities and credits, yet, in view of our inability to continue the increase of our silver circulation at the present rate without ultimately

expelling a large portion of the present stock of gold, as well as of the waning hope for the co-operation of leading commercial nations in securing the general use of silver and its unlimited coinage as money, and of the present abundant paper and increasing gold circulation in this country, I suggest the question again for the consideration of legislators, whether the law directing the monthly coinage of not less than two million dollars' worth of silver bullion into standard dollars should not be modified or repealed.

DISTRIBUTION.

The accompanying statement exhibits the amount of silver dollars on hand at the mints June 30, 1882, the number coined during the year, and balance on hand June 30, 1883, and shows the aggregate amount paid out, exchanged, and distributed from the mints during the year to have been $20,172,201; of this sum $11,494,617 were distributed from the mint at Philadelphia, $6,588,758 from the mint at New Orleans, and $2,088,826 from the mints on the Pacific coast.

AMOUNT of SILVER DOLLARS REPORTED by the COINAGE MINTS on HAND June 30, 1882, COINED during the year and on HAND at the CLOSE of the FISCAL YEAR ended June 30, 1883.

Period.	Philadelphia.	San Francisco.	Carson.	New Orleans.	Total.
On hand June 30, 1882	$4,248,069	$25,114,407	$1,260,901	$4,742,295	$35,365,672
Coinage fiscal year 1883	11,601,119	7,350,000	1,120,000	8,040,000	28,111,119
Total	15,849,188	32,464,407	2,380,901	12,782,295	63,476,791
In mints June 30, 1883	4,354,571	30,841,960	1,914,522	6,193,537	43,304,590
Distributed	11,494,617	1,622,447	466,379	6,588,758	20,172,201

COMPARATIVE STATEMENT, as shown by the TREASURER'S MONTHLY STATEMENT of ASSETS and LIABILITIES, of the COINAGE, MOVEMENT, and CIRCULATION of STANDARD SILVER DOLLARS at the END of EACH SIX MONTHS from July 1, 1882, to July 1, 1883, and for the THREE MONTHS ending October 1, 1883.

Period.	Total coinage.	In the Treasury.			In circulation.
		Held for payment of certificates outstanding.	Held in excess of certificates outstanding.	Total.	
July 1, 1882	$119,144,780	$54,506,090	$32,647,726	$87,153,816	$31,990,964
January 1, 1883	132,955,080	68,443,660	25,573,182	94,016,842	38,938,238
July 1, 1883	147,255,899	72,620,686	39,293,333	111,914,019	35,341,880
October 1, 1883	154,370,899	78,921,961	35,665,411	114,587,372	39,783,527

It appears from this statement that the total number of silver dollars had increased since the 1st of July, 1882, thirty-five millions, of which increase about $8,000,000 only had gone into general circulation, while the amount in the Treasury had increased $27,000,000, of which $24,000,000 were held for the payment of outstanding silver certificates, and the amount in the Treasury in excess of the certificates outstanding had increased from $32,647,726 to $35,665,411.

APPROPRIATIONS, EARNINGS, AND EXPENDITURES.

The total amount appropriated for the support of the mints and assay offices for the fiscal year ended June 30, 1883, was $1,198,082.07, of which amount the sum of $1,158,377.43 was expended. In addition thereto there was expended from the appropriation contained in the act of February 28, 1878, authorizing and directing the coinage of the standard silver dollars, the sum of $161,507.21 on account of the mints and $1,921.24 at the Treasury Department.

The appropriations for the several institutions, and the amount expended from each, are shown in the following table:

APPROPRIATIONS, 1883.

Institution	Salaries.	Wages.	Contingent.	Coinage of the standard silver dollar, act of February 28, 1878 (indefinite).	Total.
Philadelphia Mint	$40,907 53	$293,747 25	$100,070 68	.....	$134,725 46
San Francisco Mint	41,626 03	243,705 50	70,000 00	.....	355,331 53
Carson Mint	28,979 22	54,630 00	25,000 00	.....	108,609 22
New Orleans Mint	30,938 36	74,967 50	35,000 00	.....	140,905 86
Denver Mint	10,950 00	12,000 00	9,000 00	.....	31,950 00
New York Assay Office	38,665 07	25,705 00	10,000 00	.....	74,370 07
Helena Assay Office	7,759 93	10,180 00	10,000 00	.....	27,939 93
Boise Assay Office	3,000 00	.....	5,000 00	.....	8,000 00
Charlotte Assay Office	2,750 00	.....	2,000 00	.....	4,750 00
Saint Louis Assay Office	5,500 00	.....	6,000 00	.....	11,500 00
Total	211,076 14	714,935 25	272,070 68	.....	1,198,082 07

EXPENDITURES, 1883.

Philadelphia Mint	$40,830 64	$285,684 38	$100,069 93	$114,586 03	$541,170 98
San Francisco Mint	40,982 77	243,604 00	56,750 00	8,318 48	349,661 34
Carson Mint	28,979 22	54,620 00	24,937 05	18,332 88	126,869 15
New Orleans Mint	29,483 42	74,966 78	34,968 40	20,269 82	159,688 42
Denver Mint	10,950 09	11,145 25	5,918 99	.....	28,014 24
New York Assay Office	38,239 47	23,539 25	9,796 18	.....	71,574 90
Helena Assay Office	7,759 93	10,079 98	7,495 75	.....	25,335 66
Boise Assay Office	2,997 12	.....	5,000 00	.....	7,997 12
Charlotte Assay Office	2,750 00	.....	1,450 80	.....	4,200 80
Saint Louis Assay Office	3,500 00	.....	1,872 03	.....	5,372 03
Total	206,472 57	703,639 64	248,265 22	161,507 21	1,319,884 64

In the appendix will be found a table showing the earnings and profits from all sources at the mints and assay offices during the year, and the expenditures and losses of all kinds. The total earnings amounted to $5,215,509.76, and the total expenditures and losses to $1,720,285.16.

A statement is also appended showing the amount of gold and silver wasted by the operative officers at the coinage mints during the year, and the loss arising from the sale of bullion in sweeps, for which a lower price was obtained than the value ascertained by mint assay, and the various funds from which the wastages and loss were paid.

The total value of the gold and silver wasted at the four coinage mints during the year was $30,084.83, while gold of the value of $16,491.11 was returned by the melter and refiner of the mint at San Francisco in excess of the amount with which he was charged, and gold and silver of the value of $4,542.81 by the melter and refiner of the

mint at Philadelphia, and gold and silver of the value of $30,217.33 by the melter and refiner of the Assay Office at New York, making a total gain from this source of $51,251.25, adding to which the surplus bullion recovered from the grains and sweepings of the deposit-melting rooms of the institutions named makes a total gain of the precious metals of the value of $62,658.33, or a net excess over and above the entire amount of bullion wasted by the operative officers of $32,573.50.

REFINERY EARNINGS AND EXPENDITURES.

The charges collected of depositors during the year for parting, refining, and toughening bullion, which are appropriated by law for the payment of the expenses of those operations, amounted to $279,024.92, of which the sum of $250,280.81 was expended.

The following statement shows the refinery earnings and expenditures at the coinage mints and the New York Assay Office for the year:

Institutions.	Charges collected.	Expenditures.
Philadelphia Mint	$13,479 30	$8,537 72
San Francisco Mint	143,951 53	143,435 87
Carson Mint	22,789 01	16,188 68
New Orleans Mint	370 22	172 48
New York Assay Office	98,434 86	81,996 06
Total	279,024 92	250,280 81

The net excess of the earnings of the refineries over the expenses, from the 1st of July, 1876, to June 30, 1883, remaining in the Treasury of the United States, amounted on the 30th of June, 1883, to $169,860.24.

ANNUAL ASSAY.

The special commissioners appointed by the President, together with those designated by law, to examine and test the fineness and weight of the coins reserved by the several mints during the calendar year 1882, assembled at the mint at Philadelphia on the second Wednesday of February last as required by law.

Coins both of gold and silver which had been reserved from deliveries made by the coiners to the superintendents in each month of the year were weighed and assayed both in mass and single pieces. The committee on weighing reported that "all the coins weighed are within the limits of exactness required by law, and that in fact very few vary from the standard by one-half the tolerance."

The committee on assaying reported that the "results are all within the limits of tolerance as required by law, with the exception of one sample coin from the delivery at the New Orleans Mint January 14, 1882, the fineness of which is 898.93, being seven one-hundredths of one-thousandth below the legal limit."

Whereupon the commission reported "that the assay commission having examined and tested the reserved coins of the several mints for the year 1882, and it appearing that these coins are within the tolerance prescribed by law, except as to the reserved gold coin of the mint at New Orleans, the trial is considered satisfactory."

The fact that one of the gold coins reserved at the mint at New Orleans was deficient in fineness was certified to by the commission and reported to the President.

The Superintendent of the mint at Philadelphia, Mr. A. Loudon Snowden, was instructed to proceed to New Orleans to ascertain the cause of the defective coinage. From the facts disclosed by his report and the records it was deemed advisable that a change should be made in the office of assayer, and Dr. Jos. Albrecht was superseded by Dr. B. F. Taylor, who had been coiner of the mint prior to the late war. He was commissioned June 27, and entered upon his duties after the close of the annual settlement.

The proceedings of the Assay Commission show that the average fineness of 550 gold coins from the mints at Philadelphia, San Francisco, and Carson, melted in mass, was 899.9, and of 67 single pieces, 899.86. The assay coins from the mint at New Orleans represented a gold coinage of only $108,200, and were not assayed in mass but as single pieces, and the average of 13 assays was 899.21. The assays made monthly at the Bureau of the Mint gave an average for 122 pieces from the mints at Philadelphia, San Francisco, and Carson, of 899.9, and for 5 pieces from the mint at New Orleans, 899.64.

The annual Assay Commission ascertained that the average fineness of 950 silver dollars of the coinage of all the mints, melted in mass, was 900.38, and of 48 single pieces, one for each month's coinage at each mint, 899.93. The monthly tests made at the Bureau of the Mint of 212 silver dollars gave an average fineness of 899.9.

The assays of the annual Assay Commission and those made at this bureau substantially agree, and show that the coinage of the year was remarkably close to standard, except as to the gold coinage of the mint at New Orleans. Although the average of the latter was within the legal limit, yet, as before stated, a piece from one delivery was found deficient in fineness. It had been previously ascertained by the monthly tests at this Bureau that the gold coin of one delivery at the New Orleans mint was deficient in fineness and the Superintendent was instructed to withhold from circulation all the coins in his custody that had been made from the defective melt of ingots, for the purpose of recoinage. Tables of the annual and monthly assays appear in the appendix.

ESTIMATION OF THE VALUES OF FOREIGN COINS.

As required by section 3564 of the Revised Statutes, the Director of the Mint estimated the values of the standard coins in circulation of the various nations of the world, and the same was proclaimed by the Secretary of the Treasury on January 1, 1883.

The estimated values were those of the pure metal of such coins of standard value—the gold coins estimated at the coining rate of United States gold coins, and the silver coins at their value as bullion based upon the average price of silver bullion for the last three months of 1882.

No change was made in the values of the standard coins, which are compared with gold, but the decline in the price of silver reduced the value of the Austria florin from 40.6 cents to 40.1 cents; of the Bolivia boliviano, Ecuador peso, Peru sol, and United States of Colombia peso, from 82.3 cents to 81.2 cents; of the India rupee from 39 cents to 38.6 cents; of the Japan yen from 88.7 cents to 87.6 cents; of the Mexican dollar from 89.4 cents to 88.2 cents; of the Russia ruble from 65.8 cents to 65 cents, and of the Tripoli mahbub from 74.3 cents to 73.3 cents. The gold peso of the Argentine Republic was established as the monetary unit of that country by the law of November 5, 1881, and its value was estimated in the circular at 96.5 cents.

RHODES HOUSE

ANNUAL SETTLEMENT.

At the close of the year the operative officers of the several mints, and, on April 26, the melter and refiner of the assay office at New York, returned to their respective superintendents the balances of gold and silver bullion with which they had been charged during the year. This bullion was weighed under the superintendence of the Director or representatives of the Bureau, and the amount of wastage that had occurred was ascertained, which in no case exceeded the legal limits. All coin and bullion in the hands of the superintendents was also counted or weighed, as well as the funds belonging to the ordinary accounts, and in each case was found to agree with the books of the Treasury Department.

The gold bullion charged to the melter and refiners during the periods since their previous settlement amounted to 4,859,811,580 standard ounces, on which the legal limit for wastage was 4,859 standard ard ounces, and the actual wastage 99,045 standard ounces. Of silver bullion there were charged 59,208,831.09 standard ounces, upon which the legal allowance was 88,813 standard ounces and the actual wastage 18,890.42 standard ounces. There were charged to the coiners of the mints 3,798,568,446 standard ounces of gold bullion, on which the legal limit for wastage was 1,899 standard ounces and the actual wastage 164,186 standard ounces. There were charged also 49,929,135.50 standard ounces of silver bullion, the wastage limit on which was 49,929 standard ounces and the actual wastage 6,523.92 standard ounces. The total wastage at all the institutions was 263,231 standard ounces gold of the value of $4,897.35, and 25,414.34 ounces of silver of the value of $25,187.48, a total of $30,084.83.

MINT AT PHILADELPHIA.

At this Mint the coinage of gold was nearly fifty-two millions less than in the preceding year, in which it had executed a larger amount of gold coin than in any year of its history.

The coinage of standard silver dollars amounted to $11,601,119, and of the subsidiary coins $717,511.90 was in dimes.

There existed a large demand for minor coins; $1,428,307.16 were struck, of which $1,022,774.40 were in five-cent pieces, and $404,674.19 in one-cent pieces. The three-cent piece has never been a popular coin; only $858.57 were coined during the year. This unusually heavy coinage retarded to a considerable extent the coinage of gold bullion belonging to the Government, and necessitated the employment of a full force of workmen.

The officers of the Mint are entitled to credit, not only for the excellency of the work at this institution, but for the amount performed, considering the want of sufficient room to keep the stores and perform the labor required.

SAN FRANCISCO MINT.

The work of this Mint was about two millions less in gold, and four millions less in silver. Only $7,350,000 were coined in standard dollars, for the reason that a large amount of that donomination of coin is held by the United States Treasury in San Francisco, far ahead of the demand for circulation.

This Mint is well equipped and organized, and fully able to meet all the requirements of the Pacific Coast for coinage and parting and refin-

ing bullion, and its accounts and records are kept with commendable care and accuracy. Improvements in the arrangement of machinery and in the storage of supplies have been made by the superintendent, and under his supervision the efficiency and usefulness of the institution have been fully maintained.

CARSON MINT.

This Mint continued in operation during the entire year, the receipts of gold and silver having increased about 35 per cent. over those of the previous year. There was also an increase in the coinage from $1,546,310 to $2,523,945.

This institution is of advantage to the miners and mine owners in that portion of Nevada where it is located, in affording a local market for their silver production, as well as a convenient means of obtaining the value of their gold bullion in coin or bars.

MINT AT NEW ORLEANS.

The coinage of gold at this mint was inconsiderable, amounting to only $43,000. Standard silver dollars were struck of the value of $8,040,000, being over $3,000,000 in excess of the coinage of the fiscal year 1882.

The institution is of little local advantage, except that it furnishes a large amount of silver coin for circulation in the Southern and Southwestern States. The bullion used in its coinage is obtained from distant refineries.

A change took place in the office of superintendent in August, 1882. Mr. M. V. Davis, who was superintendent prior to that time, resigned his office, and Dr. A. W. Smyth was appointed as his successor, and soon thereafter entered upon the discharge of duty. The melter and refiner, Dr. M. F. Bonzano, was superseded by the assistant assayer, Mr. F. F. Claussen, who was commissioned June 27.

NEW YORK ASSAY OFFICE.

Mr. Pierre C. Van Wyck, who had been Superintendent of the New York Assay Office since January 1, 1882, died on April 23, 1883, and was succeeded by Mr. Andrew Mason, who had for many years held the office of melter and refiner, and whose management of that office was characterized by economy and efficiency.

Mr. Van Wyck's brief administration had, by his conscientious regard for the public interests and his courteous demeanor towards those with whom he was associated, secured for him the confidence and respect, not only of those connected with the office, but of the business community, and fully maintained the high reputation and usefulness of this institution.

The deposits of gold during the year amounted to $17,016,061.56 and of silver $6,592,657.50.

Bars were manufactured for return to depositors and for coinage amounting to $15,986,346.73 in gold and $6,448,409.66 in silver.

DENVER MINT, AND ASSAY OFFICES AT CHARLOTTE, HELENA, BOISÉ, AND SAINT LOUIS.

At these institutions the deposits of bullion were much greater than in the previous year. The business of the Denver Mint more than

doubled in amount, and at Saint Louis it quadrupled. A change was made in the office of assayer at the assay office at Boisé City. Mr. A. Wolters was superseded by Mr. N. H. Camp. A detailed statement of the bullion received at the several offices and of the gold and silver bars manufactured, appears in the Appendix to this report.

LEGISLATION RECOMMENDED.

I would respectfully recommend the passage of an act authorizing and directing:

First. The discontinuance of the coinage of the gold dollar, which has been found too small for ordinary monetary use, and is virtually out of circulation. The only calls for many years upon the mints for gold dollars have been from numismatists, for cabinet specimens, and from jewelers for conversion into personal ornaments. If the issue not only of gold coins but of United States notes in denominations less than five dollars were prohibited, their places for ordinary trade and change purposes could be amply supplied from the silver dollars and fractional silver coin now idle in the Treasury.

Second. The discontinuance of the coinage of the three-cent copper-nickel piece. This coin has also been found inconvenient on account of its size and in other respects, and although the Philadelphia Mint paid the expenses of transmission, a large number remained for some years at that institution in excess of the demand, while the number of pieces in the offices of the Treasurer and Assistant Treasurers has increased from year to year, and the accumulation in the Treasury on the 30th of September, 1882, amounted to over five million pieces, being nearly one-fifth of its entire coinage.

The coinage of this denomination was originally authorized in the act of 1851 reducing the rate of letter postage to three cents, and the purpose appears to have been to furnish a convenient coin for paying letter postage. If the issue of a coin for such purposes is desirable, as the rate for letter postage is now but two cents, a two-cent bronze or copper-nickel coin of suitable size would be convenient, not only for this object, but in paying small sums and making change. The advantages and reasons for issuing this denomination I presented in my report for 1879.

Third. The repeal of the act authorizing the coinage of the trade dollar.

Although its coinage is now discretionary with the Secretary of the Treasury and has been suspended by him, the issue of this coin in any contingency should no longer be authorized or permitted at any of the United States Mints. Originally made in the coinage act of 1873 a legal tender, to the same extent as the other designated silver coins, a considerable number had probably, before its demonetization in 1876, gone into circulation in this country. The statistics of coinage and exports show that at the latter date the number of pieces coined exceeded the exportations by over two million dollars. Probably from five to seven millions of these coins are now held in the country, mostly in the mining and manufacturing regions of Pennsylvania and contiguous States, and in the vicinity of New York, where they have been paid to workmen and laborers, and by them paid to and received from tradesmen in those localities.

While the United States has incurred no legal liability, yet by the act of the Government the coins were at first put into circulation and given compulsory currency, and have fallen into the hands of those who

can ill afford to suffer from the depreciation, and it would seem but an act of justice that the United States should permit these coins to be sent to the mints and exchanged for other silver coins, into which they could be profitably recoined.

I doubt not that action of this kind would have long since been taken, but for the apprehension that a large number of exported trade dollars would be returned to this country. My own investigations and inquiries have satisfied me that the trade dollars sent to China have gone to the melting pots and become sycee silver or disappeared in the interior of that country; for, although their value as silver bullion would be only about eighty-seven cents, yet their commercial market value in New York City has, prior to the late movement to depress their price, fallen below ninety-eight cents but once, and that for a short period, and has usually ranged for several years above ninety-nine cents, and had it been possible to secure trade dollars for import from China to this country, the profits on the operation would have brought them here long since.

SUIT AGAINST THE SUPERINTENDENT AND MELTER AND REFINER AT SAN FRANCISCO.

The suit in the United States circuit court of California against the superintendent and melter and refiner of the mint at San Francisco, for an alleged infringement of a patent issued to John Reynolds, to which I called attention in my report for 1880, was brought to a hearing, and a decree was rendered by the court in favor of the complainant, Reynolds, declaring the method of refining previously practiced at that mint an infringement of the patent, and adjudging him entitled to damages.

The fact that silver bullion containing one-fourth part or less of gold need not be melted or run into smaller bars or granulations to separate the two metals was known prior to the date of the patent, and there appears to me to have been no novelty in a process for parting without melting and granulating such bullion as the Comstock bars which contained gold in small proportions.

The United States, however, granted the patent, and although contested by the United States district attorney, the circuit court sustained its validity, and decreed that the complainant should recover his damages.

To separate gold and silver in the manner employed at that mint, and decided to be an infringement of the patent, was more economical and of pecuniary advantage to the Government, but of no personal benefit to the officers. It would, therefore, seem just and proper not only that the officers of the mint against whom the suit was brought should be relieved from personal responsibility in this matter, but also that Mr. Reynolds should be compensated to the extent that the Government has been benefited.

MONETARY STATISTICS OF THE UNITED STATES.

Inquiries relative to the production, import, export, and consumption of the precious metals have been continued, and much valuable information has been obtained, which has been tabulated for convenience of reference, and is herewith submitted.

PRODUCTION OF GOLD AND SILVER IN THE UNITED STATES.

Nearly all of the gold and silver obtained from mines of the United States is directly or indirectly deposited in the mints and assay offices

or exported through the custom-house to foreign countries, and unusual facilities are thus afforded for ascertaining the total production of the country. Records are kept stating the character of each deposit, and, as far as practicable, if of domestic bullion, the locality of its production.

This information is tabulated from year to year, and published in the Director's reports.

As, however, the statistics of the annual production are now procured and compiled for a special report, it has been found of advantage to obtain the necessary data for the calendar instead of the fiscal year. The detailed estimate of production for each State and Territory has therefore been discontinued as to the fiscal year, and that for the calendar year 1882 is substituted.

From this report it appears that the production of the several States and Territories, in 1882, was estimated as follows:

State or Territory.	Gold.	Silver.	Total.
Alaska	$150,000	.....	$150,000
Arizona	1,065,000	$7,500,000	8,565,000
California	16,800,000	845,000	17,645,000
Colorado	3,360,000	16,500,000	19,860,000
Dakota	3,300,000	175,000	3,475,000
Georgia	250,000	.....	250,000
Idaho	1,500,000	2,000,000	3,500,000
Montana	2,550,000	4,370,000	6,920,000
Nevada	2,000,000	6,750,000	8,750,000
New Mexico	150,000	1,800,000	1,950,000
North Carolina	190,000	25,000	215,000
Oregon	830,000	35,000	865,000
South Carolina	25,000	.....	25,060
Utah	190,000	6,800,000	6,990,000
Virginia	15,000	.....	15,000
Washington Territory	120,000	.....	120,000
Wyoming	5,000	.....	5,000
Total	32,500,000	46,800,000	79,300,000

The total amount, compared with that of the preceding year, indicated that the production of the calendar year 1882 declined $2,200,000 in gold and increased $3,800,000 in silver. The probable production of the present calendar year cannot be stated absolutely from the information thus far received.

The mints and assay offices, during the fiscal year ended June 30, 1883, embracing six months of the last and six months of the present calendar year, received domestic bullion of the value of $32,481,642.38 gold and $32,758,487.68 in silver; which exceeds the amount of similar bullion received during the calendar year 1882 by $1,103,393.58 in gold and $1,357,694.74 in silver. The exports of domestic silver bullion were also, during the fiscal year, $1,490,000 greater.

The increased deposit of domestic gold was occasioned chiefly by the closing of the San Francisco Mint for receiving deposits earlier than usual in June, 1882, and deposits which otherwise would have been made in that month were held back until July of the succeeding (or last) fiscal year.

The reports published in the mining journals of the production of many leading mines during the first half of the calendar year 1883, compared with their production for the same period in the previous year, show a diminished yield of about two millions of dollars. These reports, however, are too incomplete to furnish safe data, and a better criterion is a comparison of the amounts of gold and silver received at the mints and assay offices and the exports of domestic bullion to foreign countries.

For the first eight months of 1883 the value of the deposits of gold bullion is less than for the corresponding period in 1882 by a half million of dollars, and the silver deposits, purchases, and exports exceed those for the same time in the former year by two millions of dollars.

The production of gold in the calendar year 1883 will probably be at least a half million less and that of silver at least two millions greater than that of the previous year.

CONSUMPTION OF THE PRECIOUS METALS.

In the report for 1882 it was estimated that the consumption of the precious metals in the United States for use in the arts and manufactures probably exceeded $12,000,000 of gold and $7,000,000 of silver, ot which $7,000,000 of gold and $6,000,000 of silver were of domestic production.

This estimate was based upon the results of inquiries made in 1881 by circular letters to manufacturers in the United States, and also upon the amount of bullion furnished by the New York Assay Office for manufacturing purposes. During the last fiscal year the New York Assay Office supplied bars for this purpose as follows:

Bars furnished to manufacturers.	Gold.	Silver.
Of United States coin	$138 15	$1,365 82
Of foreign coin	130,505 04	102,220 28
Of foreign bullion	253,799 44	335,016 73
Of plate, &c	685,010 30	205,851 10
Of domestic bullion	5,094,808 36	4,860,038 40
Total	6,144,270 29	5,504,492 33

Besides these deposits of gold and silver bullion for bars to be used in manufactures, the arts, &c., gold bars of the value of $1,946,255 were for similar use delivered to manufacturers and dealers in bullion in exchange for gold coin, making the total value of gold bars prepared at that institution and delivered for manufacturing purposes $8,090,525. If to this is added the bars prepared for depositors and exchanged for gold coin at Philadelphia, an aggregate of $187,541, and those sold for similar purposes by private refiners, and the amount of coin and gold in the form of lumps and grains, the estimate heretofore made that $12,000,000 of gold is annually consumed in manufactures, the arts, and ornamentation, and that at least $7,000,000 of this is of domestic production, is sustained as to the amount thus consumed in the fiscal year 1883; while the amount of silver thus used would appear to have declined by a half million of dollars.

COIN CIRCULATION OF THE UNITED STATES.

On the 1st of July, 1883, the total coin circulation of the United States amounted to about $765,000,000, of which $537,000,000 is gold and $228,000,000 silver coin. This estimate is based upon my estimate of the circulation of the country in 1873, which I placed at $135,000,000 in gold and $5,000,000 in silver. To this last estimate I added the subsequent annual gains to the metallic circulation by coinage and import of coin and deducted the losses from recoinage and export of coin up to July 1, 1879, making the coin circulation at that date, gold, $236,490,698, silver, $112,050,985. It was assumed that during that period the coins brought into the country by immigrants on their persons and not reported at the custom-house, equaled the amount of coin consumed in the arts not deposited at the mints and assay offices. As the custom house re-

turns in 1879 and subsequently, distinguished United States from foreign coins, the estimates for the last four years have been based upon the coinage deposit, import and export of United States coins, deducting $8,500,000 for a possible excess of undeposited coins melted above the unreported amount brought by immigrants.

In my last annual report I estimated the circulation of United States coin to have been $500,000,000 of gold and $200,000,000 of silver; the exact figures of coinage and import, less recoinage, export, and estimated use in the arts, being $500,882,185 of gold and $199,573,360 of silver. During the year the coinage amounted to $35,936,927.50 of gold and $28,835,470.15 of silver; the imports of United States coin were $8,112,265 of gold and $670,192 of silver. During the same period $374,129 of gold coin and $636,983 of silver coin were deposited at the mints for recoinage, and $4,802,454 of gold coin and $150,894 of silver coin were exported.

I have estimated that the amount of United States coin melted by manufacturers during the year was $2,500,000 of gold and $75,000 of silver.

The following table therefore shows the gain during the year:

United States coin.	Gold.	Silver.	Total.
Circulation June 30, 1882	$500, 882, 185	$199, 573, 360	$700, 455, 545
Year's coinage, less deposits for recoinage	35, 562, 798	28, 198, 541	63, 761, 339
Excess of imports over exports	3, 309, 811	519, 298	3, 829, 109
Total	539, 754, 794	228, 291, 199	768, 045, 993
Less amount used in the arts	2, 500, 000	75, 000	2, 575, 000
Circulation July 1, 1883	537, 254, 794	228, 216, 199	765, 470, 993

From the Treasurer's statement of the amount of coin in the Treasury and of gold and silver certificates outstanding, and from the reports made by national banks to the Comptroller of the Currency showing the amount of certificates held by them, it appears that the gold and silver coin of the country on the 1st of July, 1883, was owned as follows:

Belonging to-	Gold.	Silver.			Total United States gold and silver coins.
		Legal tender.	Subsidiary.	Total	
Treasury	*$82, 017, 125	*$39, 203, 351	$28, 486, 001	$67, 779, 352	*$149, 796, 477
National banks	†105, 024, 406	†7, 121, 130	‡3, 208, 858	10, 329, 988	†115, 354, 394
Other banks	†25, 000, 000	†100, 841, 418	49, 265, 441	150, 106, 859	†500, 320, 122
Private hands	†325, 213, 263				
Total	537, 254, 794	147, 255, 899	80, 960, 300	228, 216, 199	765, 470, 993

*Less outstanding certificates. †Including Treasury certificates. ‡Estimated.

In the above table I have deducted from the stock in the Treasury and credited to the banks and the public to the amount of the certificates held by them, respectively, the coin represented by and required by law to be kept in the Treasury for the payment of outstanding gold and silver certificates.

From July 1 to October 1 there was an additional coinage, less recoinage, of $7,646,575 of gold, and $7,235,372 of silver. During the same period the coin circulation gained $236,330 of United States gold

coin by import and lost $141,498 of silver coin by export. Making a proportionate estimate of the amount of coin melted for manufacturing purposes during the three months and deducting the same would make the circulation of United States coin on the 1st instant $544,512,699 of gold, and $235,291,323 of silver, a total of $779,804,022, as appears in the following table:

GAIN in COIN from JULY 1, to OCTOBER 1, 1883.

	Gold.	Silver.	Total.
Circulation July 1, 1883	$537, 254, 794	$228, 216, 199	$765, 470, 993
Coinage to October 1 (less recoinage)	7, 646, 575	7, 285, 372	14, 881, 947
Excess of imports over exports to October 1*	236, 330		236, 330
Total	545, 137, 699	235, 451, 571	780, 589, 270
Less excess of exports over imports*		141, 498	141, 498
Remainder	545, 137, 699	235, 310, 073	780, 447, 772
Less amount used in manufactures	625, 000	18, 750	643, 750
Circulation October 1, 1883	544, 512, 699	235, 291, 323	779, 804, 022

* All ports for July and August; only New York and San Francisco for September.

In addition to this amount of coin, the mints and assay offices held for coinage on October 1st, $61,683,816 of gold bullion and $5,107,911 of silver bullion, making the total amount of United States coin and bullion available for coinage $606,196,515 of gold and $240,399,234 of silver, or $846,595,749 of both gold and silver.

TOTAL UNITED STATES CIRCULATION AND ITS DISPOSITION.

The following table, compiled in this Bureau from the published statements prepared by the Comptroller of the Currency and the Treasurer of the United States, as to the holdings of the banks and Treasury, shows the character and condition of the circulation of the country on the 1st of July, 1883:

STATE of CIRCULATION JULY 1, 1883.

	In Treasury.	In national banks	In other banks and general circulation.	Total.
Gold bullion	$56, 254, 071			$56, 254, 071
Silver bullion	4, 482, 216			4, 482, 216
Gold coin	141, 824, 495	$72, 232, 816	$323, 197, 483	537, 254, 794
Silver dollars	111, 914, 019	4, 000, 000	31, 341, 880	147, 255, 899
Fractional silver coin	28, 486, 001	3, 208, 858	49, 265, 441	80, 960, 300
Gold certificates	22, 571, 270	32, 791, 590	27, 015, 780	82, 378, 640
Silver certificates	15, 990, 145	3, 121, 130	69, 499, 556	88, 616, 831
United States notes	36, 498, 830	73, 832, 458	236, 349, 719	346, 681, 016
National bank notes	8, 217, 062	31, 748, 004	316, 850, 444	356, 815, 510
Fractional currency	4, 657	456, 447	6, 539, 586	7, 000, 690
Total	426, 248, 775	221, 391, 303	1, 060, 059, 889	1, 707, 699, 967

No account has been taken of the small amounts of unredeemed legal-tender, demand, and interest-bearing notes, which cannot be considered in circulation at the present time.

Strictly speaking, the gold and silver bullion in the Treasury cannot be denominated circulation, but though not money, such bullion may be considered as a part of the Treasury metallic reserve, being held and in case of necessity immediately available for conversion into coin, and

therefore is included in Table XXXIV in the appendix, showing the general circulation.

Comparing the foregoing table with a similar one in my last report, showing the state of circulation at the close of the preceding year, it will be seen:

1st. That the total circulation of gold coin has increased in the year $36,400,000, and of silver coin $28,500,000; the outstanding gold certificates increased about $55,000,000, silver certificates $18,000,000, a total of $73,000,000, while the total national bank note circulation diminished nearly $2,000,000.

2d. The Treasury owns, deducting outstanding certificates, $5,000,000 less gold coin and $7,000,000 more of silver coin, and $4,000,000 more of United States and national bank notes.

3d. The national banks have gained $17,500,000 in the total circulation held by them, and increased their stock of coin, including certificates, $1,000,000 in gold and $2,500,000 in silver, and gained $14,000,000 in paper.

4th. The paper and metallic circulation held by the public and the banks other than the national increased $40,000,000, gaining, including certificates, $40,000,000 in gold and $19,000,000 in silver, a total of $59,000,000 in coin, but losing $19,000,000 in United States and national bank notes.

From July 1 to October 1, 1883, there was a further net increase in the circulation of the United States, amounting to $22,897,856, as appears from the following statement:

STATE of TOTAL UNITED STATES CIRCULATION October 1, 1883.

[Amount held in the Treasury, taken from Treasurer's statement of September 29.]

	In Treasury.	In banks and general circulation.	Total.
Gold bullion	$61,683,816	.....	$61,683,816
Silver bullion	5,107,911	.....	5,107,911
Gold coin	144,446,726	$400,065,973	544,512,699
Silver dollars	114,587,372	39,783,527	154,370,899
Silver fractional coin	26,750,161	54,170,263	80,920,424
Gold certificates	27,480,300	55,014,940	82,495,240
Silver certificates	15,568,280	78,921,961	94,490,241
United States notes	37,194,420	309,486,596	346,681,016
National bank notes	6,017,710	347,324,961	353,342,671
Fractional currency	5,803	6,987,103	6,992,906
Total	438,842,499	1,291,755,324	1,730,597,823

Assuming that the same amount of paper and specie respectively were in the national banks on the 1st of October as on the 22d of June, the comparative changes in the circulation held by the public and banks other than national from October 1, 1882, to October 1, 1883, have been as follows:

UNITED STATES CIRCULATION HELD by the PUBLIC and BANKS OTHER THAN NATIONAL.

Description.	October 1, 1882.	October 1, 1883.	Increase.	Decrease.
Gold coin	$320,902,688	$327,833,157	$6,930,469	.....
Silver dollars	30,801,231	35,783,527	4,982,296	.....
Fractional silver	49,687,535	50,961,405	1,273,870	.....
Gold certificates	313,140	22,223,350	21,910,210	.....
Silver certificates	61,397,180	75,800,831	14,403,651	.....
United States notes	251,419,341	235,654,138	.....	$15,765,203
National bank notes	340,104,018	315,576,957	.....	14,527,061
Fractional currency	6,623,253	6,530,656	.....	92,597
Total	1,051,248,386	1,070,364,021		

Net increase, $19,115,635.

THE COURSE OF PRICES IN THE UNITED STATES IN 1882–1883.

The tables showing the average prices of the principal domestic exports during the fiscal year ended June 30, 1883, and of leading commodities in the New York market for the calendar year 1882, in continuation of similar tables for previous years, have been prepared and accompany this report. The prices of domestic exports, as appear from the average values declared at the custom-house, have not, in the aggregate, materially varied from those of the previous year, if five of the less important articles, upon which the prices advanced 50 per cent. and over, are omitted.

Upon the basis of the previous year's prices of all the articles in the table, the average per cent. of advance or decline of the prices of the fiscal year 1883 would show a rise of 4 per cent. in general prices; but if the per cent. of advance or decline of each article is multiplied by its value exported, the mean decline would show a fall of 1.1 per cent. in general prices.

The average yearly prices of staple articles in the New York market during the calendar year 1882, compared with the prices of 1881, taken from the same source and in the same manner as described in my last report, show an advance in the average percentages of the prices of 1882 of 1.6 per cent. upon the prices of 1881, and 3.3 per cent. upon the average prices for fifty-six years prior to 1881.

For the purpose of comparing the course of prices for the same period in this country and Great Britain, a table has been prepared giving the prices, quantities, and values for the years 1881 and 1882, and the percentages of the prices of the latter year to those of the former, on nearly all the articles imported into the United Kingdom for those years of which the quantities and values are given in the published customs returns of that country. They show a great steadiness in prices and no large decline in the principal imports except cotton and petroleum, and no considerable advance except in hops. The mean of the total average advance or decline in the price of each article upon its price in the previous year was 1.6 per cent. advance.

* * * * * * *

MONETARY STATISTICS OF THE WORLD.

For convenient reference the statistical information contained in the foregoing summary and attainable from other reliable sources has been tabulated and accompanies this report, giving the production, coinage, and consumption of gold and silver and the metallic and paper circulation of all the principal countries in the world.

THE PRODUCTION OF GOLD AND SILVER IN THE WORLD.

The production of the precious metals has been revised for the years 1880 and 1881, and the additional year 1882 added, and is given by producing countries, as will be seen from the table in the appendix.

The production of twenty countries is estimated from official reports and other published information to have been for the calendar year 1882, of gold, 155,226 kilograms, valued at $103,161,532, and of silver, 2,633,860 kilograms, amounting, at the coining rate of the silver dollar, to $109,446,586, showing a decrease from the corrected estimate of 1881 of about $4,000,000 in gold and an increase of about $6,000,000 in silver.

As to two of the foreign countries, from which, together with the United States, is obtained the greater part of the annual yield of gold, namely, Australia and Russia, the figures for Australia for 1880 and 1882 are taken from official information contained in my reports, and I have carefully revised the estimate of the production of that country for 1881.

From official sources the production of gold of Victoria and New South Wales for that year is given as 1,007,773 ounces, to which I have added the mean of the production of Queensland, Tasmania, New Zealand, and South Australia from official sources for 1880 and 1882, giving as the production of those four provinces the sum of 477,000 ounces, making a total production for Australia for 1881 of 1,484,773 ounces, valued at $30,690,000.

With reference to the production of the mines of Russia, I have no information later than for the calendar year 1879, and I have therefore been obliged to estimate the production for each of the three years embraced in the table as the same as for 1879.

With reference to Mexico, which next to the United States is the largest producer of silver, its production for 1882 is from official information accompanying this report, and for 1881 I have taken as the production of that country the bullion deposited at the mints and exported as given by official papers.

The production of Bolivia for 1882, for lack of any better information is given as the same as for 1881, which was from official sources.

THE WORLD'S COINAGE.

In the appendix will be found a table showing the coinages of twenty-four countries for the calendar years 1880, 1881, and 1882, as far as they could be ascertained.

Of a total for 1882 of $99,906,986 of gold the United States coined $65,887,685, and of a total coinage of $107,997,952 of silver it coined $27,972,035, greater by about $2,800,000 than that of Mexico, and larger than that of any other country in the world except India, which exceeded it by about $1,300,000.

PAPER AND SPECIE CIRCULATION OF THE PRINCIPAL COUNTRIES OF THE WORLD.

The tables which have been heretofore published in my reports giving the paper and metallic circulation of the principal countries of the world, compiled as far as possible from official dispatches and reliable data, have been corrected and enlarged to as late a date as possible, and the number of countries embraced has been increased to thirty-eight.

The total paper circulation of these countries, embracing the issue of both Government and bank notes, amounts to $3,832,920,903, and the gold and silver circulation, the latter divided as far as possible into full legal tender and limited tender, amount to $3,333,433,000 gold coin, $2,712,226,000 silver coin, a total, including the coin in banks and treasuries, of $6,045,659,000.

Following will be found a table showing only the paper circulation and the amount of coin and bullion in national treasuries and banks, from which it would appear that there were in the treasuries and banks of the same countries, as far as known, gold and silver coin and bullion amounting to $1,839,833,440.

From these tables an additional table has been prepared, and is appended, in which the amount of coin and bullion in the national treas-

uries and banks has been deducted from the total specie and paper circulation shown by the first table, so as to show the amount of paper and specie in active circulation in the countries named, which amounts to $8,038,746,463. A *per capita* of the circulation of each country is also given.

These tables have been prepared with care after an examination of the official reports and best authorities accessible, and though not considered as absolutely correct, may be regarded as a probable approximate statement for each country of the amount, character, and disposition of its circulation.

CONCLUSION.

Besides the current work incident to the supervision and direction of the business and operations of the mints and assay offices, the examination and comparison of their daily reports and monthly and quarterly accounts, and the testing of the accuracy of their coinage in the assay laboratory, a large amount of labor has been performed in the collection of information for publication and general use in regard to the supplies of gold and silver, of their coinage, consumption, and circulation in the United States and in the world.

In the discharge of official duties and in the preparation of material for the annual and special reports emanating from this Bureau I gratefully acknowledge the valuable assistance, skill, industry, and faithfulness of the clerks in my office, as well as of the officers and clerks in the various mints and assay offices.

I am, very respectfully,

HORATIO C. BURCHARD,
Director.

Hon. CHARLES J. FOLGER,
Secretary of the Treasury.

REPORT OF FIRST COMPTROLLER OF THE TREASURY.

TREASURY DEPARTMENT,
FIRST COMPTROLLER'S OFFICE,
Washington, November 15, 1883.

SIR: In compliance with the request made in your letter of September 10, 1883, I have the honor to submit the following report of the transactions of this office during the fiscal year which ended June 30, 1883.

The following-described warrants were received, examined, countersigned, entered into blotters, and posted into ledgers under their proper heads of appropriation:

Kind.	Number of warrants.	Amounts.
APPROPRIATION.		
Treasury proper	79	$43,113,668 58
Public debt	1	649,243,961 21
Diplomatic and consular	6	2,175,275 87
Customs	18	23,982,208 21
Internal revenue	9	5,949,011 01
Interior civil	17	8,621,048 05
Indians and pensions	42	112,114,407 51
War	23	54,669,909 55
Navy	15	19,056,257 60
	208	918,925,747 59
ACCOUNTABLE AND SETTLEMENT.		
Treasury proper	2,939	$28,424,642 26
Public debt	80	649,315,672 17
Quarterly salaries	1,833	595,759 10
Diplomatic and consular	3,031	2,503,776 83
Customs	3,811	21,044,377 90
Internal revenue	4,570	5,815,731 80
Judiciary	4,314	4,225,675 42
Interior civil	2,605	8,745,431 41
Indians and pensions	5,244	82,286,928 22
War	8,823	50,333,730 77
Navy	2,283	21,324,952 76
	39,533	874,616,678 64
COVERING.		
Indians and pensions repay	501	8,911,764 24
War repay	1,653	1,422,347 88
Navy repay	305	6,302,819 77
Miscellaneous repay: Interior civil, Treasury, customs, judiciary, diplomatic and consular, internal revenue, and public lands	2,496	2,747,382 50
	4,955	19,384,314 39
Miscellaneous revenue covering warrants	10,403	318,387,609 68
Internal-revenue covering warrants	1,751	144,720,368 98
Land covering warrants	1,209	7,955,864 42
Customs covering warrants	1,580	214,706,496 93
	14,943	685,770,340 01

RECAPITULATION.

Pay, repay, and appropriation warrants	44,696
Miscellaneous and internal revenue, and lands, and customs covering	14,943
Total warrants received and passed	59,639
Miscellaneous requisitions registered and countersigned	782
Requisitions on chief clerk and stationery clerk of the Department	418
Grand total	60,839

Accounts have been received from the auditing offices, revised, recorded, and the balances thereon certified to the Register of the Treasury, as follows:

Kind.	No. of accounts.	No. of vouchers.	Amount involved.
FROM THE FIRST AUDITOR.			
1. *Judiciary:*			
Accounts of marshals for their fees and for expenses of courts, of district attorneys and their assistants, of clerks of courts, of circuit court commissioners, and accounts for rent of court rooms	4,288	111,152	$4,819,019 84
Judgments by Court of Claims examined and ordered paid	39	39	646,129 77
Total	4,327	111,191	5,465,149 61
2. *Public Debt:*			
Accounts of the Treasurer of the United States:			
For coupons payable in coin	95	1,477,593	8,184,413 30
For coupons of Treasury notes, Louisville and Portland Canal stock, and old funded debt of the District of Columbia	52	115,311	2,458,206 99
For bonds of the District of Columbia purchased for sinking funds	2	843	217,662 24
For United States bonds redeemed	37	71,352	479,631,364 19
For Louisville and Portland Canal stock	1	1	1,000 00
For unclaimed interest	7	78	7,306 80
For interest on Pacific Railroad stock (reimbursable)	13	420	2,898,794 38
For checks for interest on the public debt	91	349,719	60,218,041 14
For gold certificates and refunding certificates	24	13,864	1,614,885 26
For certificates of deposit (act June 8, 1872)	10	1,838	15,880,000 00
For legal-tender notes, old demand notes, fractional currency, and silver certificates	38	1,547	115,870,106 15
For compound-interest, seven-thirty, and other old Treasury notes	40	398	11,726 85
For interest on Navy pension fund	1	1	420,000 00
For sinking fund for bonds of the Central Pacific Railroad Co.	1	2	552,636 00
Total	412	2,032,967	687,466,142 90
3. *Public Buildings:*			
Accounts for the construction of public buildings throughout the United States, the fire-proof building for the Pension Office, and the buildings for the State, War, and Navy Departments, and the Bureau of Engraving and Printing, Washington, D. C.; for the completion of the Washington Monument, the care of public buildings and grounds under the Chief of Engineers, U. S. A.; for annual repairs of the Capitol and improving the Capitol grounds; extension of Government Printing Office, and enlarging Court-House, Washington, D. C.; for Coast and Geodetic Surveys; and for the beneficiary and charitable institutions in the District of Columbia	356	20,240	3,203,079 52
4. *Steamboats:*			
Accounts for salaries and incidental expenses of inspectors of hulls and boilers	1,093	12,296	266,112 71
5. *Territorial:*			
Accounts for salaries of Territorial officers and for the legislative and contingent expenses incidental to the government of the Territories	295	2,455	293,373 73
6. *Mint and Assay:*			
Accounts for gold, silver, and nickel coinage; for bullion; for salaries of the officers and employés of the several mints, and for the general expenses of the same; and for bullion deposits, purchases, and transfers	409	103,404	195,076,926 71

Kind.	No. of accounts.	No. of vouchers.	Amount involved.
FROM THE FIRST AUDITOR—Continued.			
7. *Transportation:*			
Accounts for transportation of gold and silver coin and bullion, minor and base coin, United States currency, national-bank notes, complete and incomplete coin certificates, registered and coupon bonds, mutilated currency, canceled and incomplete securities, national-bank notes for redemption, stamp-paper, stationery, boxes, parcels, &c	105	57,422	$134,294 15
8. *Congressional:*			
Accounts for salaries of the officers and employés, and for contingent and other expenses of the United States Senate and House of Representatives	190	8,708	1,258,451 01
9. *Outstanding Liabilities:*			
Accounts arising from demands for payment of drafts and disbursing-officers' checks which have remained outstanding for three years, the funds from which they were payable having been covered into the Treasury	99	114	30,307 17
10. *District of Columbia:*			
Accounts of the Commissioners of the District of Columbia and general accounts between the United States and said District	196	91,565	8,640,100 82
11. *Public Printing:*			
Accounts of the Public Printer for the salaries and wages of the employés of the Government Printing Office, for the purchase of materials for printing, and for contingent expenses of the Government Printing Office	197	19,434	2,141,541 86
12. *Treasurer's General Accounts:*			
Quarterly accounts of the Treasurer of the United States for receipts and expenditures, including receipts from all sources covered into the Treasury, and all payments made from the Treasury	4	51,431	951,350,929 68
13. *Assistant Treasurers' Accounts:*			
Accounts of the several assistant treasurers of the United States for the salaries of their employés and the incidental expenses of their offices	78	2,261	378,299 09
14. *Miscellaneous:*			
Accounts of the disbursing officers of the executive Departments for salaries of officers and employés, and contingent expenses of the same; accounts for salaries of Senators and Representatives in Congress; for salaries of the judges of the United States Supreme Court, United States circuit and district judges, district attorneys and marshals; for salaries and contingent expenses of the National Board of Health; and for the expenses of the Tenth Census	3,558	172,725	19,430,093 62
Total from the First Auditor	11,409	2,686,213	1,875,134,802 61
FROM THE FIFTH AUDITOR.			
15. *Internal Revenue:*			
Accounts of collectors of internal revenue	543	48,992	299,012,598 20
Accounts of same acting as disbursing agents	949	39,680	3,209,192 63
Accounts of internal-revenue stamp agents	126	2,528	2,556,085 55
Miscellaneous internal-revenue accounts, including direct tax accounts with the States and with direct-tax commissioners; accounts with collectors for disbursements under the appropriation for punishment for violation of internal-revenue laws, and for expenses of seizure and sale of property for the violation of said laws; seven different monthly accounts with the Commissioner of Internal Revenue for internal-revenue stamps; accounts with the Secretary of the Treasury for deposits made in compromise cases, and for fines, penalties, and forfeitures; accounts with the Treasury Department for stationery furnished to internal-revenue offices; accounts with the disbursing clerk for payment of internal-revenue agents and gangers, and for disbursements under three other different appropriations; accounts for refunding			

Kind.	No. of accounts.	No. of vouchers.	Amount involved.
FROM THE FIFTH AUDITOR—Continued.			
15. *Internal Revenue*—Continued.			
taxes on spirits destroyed, and for the redemption of internal-revenue stamps; accounts for rewards for information and other expenses of detecting and suppressing violators of internal-revenue laws; expense accounts of revenue agents and distillery surveyors; also drawback accounts and accounts for paper for internal-revenue stamps; for transportation of stationery, and for purchasing hydrometers, stamps, dies, locks, seals, &c	2,570	42,301	$564,200,600 59
16. *Foreign Intercourse:*			
Accounts for the salaries, of ministers, charges d'affaires, consuls, commercial agents, interpreters, secretaries to legations, and marshals of consular courts; accounts for the relief and protection of American seamen, for expenses of prisons in China and Japan, for contingent expenses of legations and consulates, for salaries and expenses of legations and consulates, also for those of mixed commissions, accounts of United States bankers in London; accounts of the disbursing clerk, Department of State, for miscellaneous diplomatic expenses, &c	2,792	41,451	7,542,397 74
17. *Transportation:*			
Accounts for transportation of internal-revenue moneys to the sub-treasuries and designated depositories, and for the transportation of stationery, &c., to internal-revenue offices	31	12,806	7,754 03
Total from Fifth Auditor	5,393	96,558	571,750,752 36
FROM THE COMMISSIONER OF THE GENERAL LAND OFFICE.			
18. *Public Lands:*			
Accounts of surveyors-general and the employés in their offices	239	3,546	470,173 33
Accounts of deputy surveyors	673	1,205	1,846,273 68
Accounts of receivers of public moneys	394	11,526	6,828,117 12
Accounts of same acting as disbursing agents	515	2,504	526,287 25
Accounts for the refunding of purchase money paid for lands erroneously sold	515	4,919	54,152 77
Miscellaneous accounts, such as accounts with the several States for indemnity for swamp and overflowed lands erroneously sold, and for 2 per cent., 3 per cent., and 5 per cent., upon the proceeds of sales of public lands; accounts of surveyors-general for the contingent expenses of their offices; accounts for the salaries and commissions of registers of local land-offices not paid by the receivers; accounts with the Kansas, Denver, Central, Northern, and Union Pacific Railroads, for the transportation of special agents of the General Land Office; accounts for printing and stationery furnished the several surveyors-general, registers, and receivers; accounts of special agents of the Interior Department; accounts for the transportation of public moneys from the local land-offices to designated depositories; accounts for salaries and incidental expenses of agents employed to examine and verify public surveys; for the return of deposits in excess of the amount required for the survey of private land claims; for the transportation of stationery to the several district land-offices, &c	508	4,787	1,051,001 03
Total from Commissioner of General Land Office	2,844	28,487	10,276,005 18

RECAPITULATION.

From—	Number.	Vouchers.	Amount involved.
First Auditor	11,409	2,686,213	$1,875,134,802 61
Fifth Auditor	5,393	96,558	571,750,752 36
Commissioner of General Land Office	2,844	28,487	10,276,005 18
Total	19,646	2,811,258	2,457,161,560 15

Requisitions for the advance of money from the Treasury, in the number following, have been examined and advances thereon recommended:

Internal revenue	1,579
Foreign intercourse	1,451
Judiciary	589
Public buildings	213
Mint and assay	389
District of Columbia	156
Territorial	52
Printing office	40
Miscellaneous	761
Total	5,230

Official letters written	13,207
Letters received, briefed and registered	6,057
Powers of attorney recorded	2,508
Official bonds registered and filed	715
Number of internal-revenue special tax stamp books counted and certified	5,665
Number of internal-revenue tobacco stamp books counted and certified	11,627
Number of spirit books counted and certified	10,277
Orders for special allowances to collectors examined, recorded and referred	244
Reports on accounts compared and transmitted	1,568
Collectors' tax-list receipts (Form 234) registered, scheduled and referred	1,548
Cases for suits against internal revenue collectors prepared and referred	5
Copies of public-land accounts made, compared and transmitted	1,167
Caveat cases (United States bonds)	18
Folios copied	9,545

The foregoing statement omits mention of a large amount of official work which does not admit of systematic classification and detailed report, and yet has occupied much time and care; such as, *e. g.*, investigation of legal points arising in the adjustment of accounts and the preparation of opinions and decisions printed under the authority of Congress; the examination of, and decision upon, applications for the issuing of duplicate bonds and other securities lost and destroyed; examination of powers of attorney for collection of money due to creditors of the United States; decisions upon the rights of persons claiming to be executors, administrators, or heirs of deceased claimants to receive money due from the United States; examination of official bonds; copying of letters forwarded; answering calls for information made by Congress, the Departments, and private persons; receiving and examining emolument returns, and other work of a miscellaneous character.

RENEWAL OF THE ACT OF JUNE 14, 1878. (20 Stat., 130, Sec. 4.)

From an early period in the history of the Government Congress has made provisions, by law, generally limiting the authority to pay claims against the United States to a definite period after the proper appropriation had been made for that purpose. This has been done by a series of acts, which limited the use of *annual* appropriations for the purpose of paying claims accrued within the year for the service of which the appropriations were made, to two years thereafter, and by providing that any unexpended balances of appropriations should be carried to the surplus fund. (Act March 3, 1795, 1 Stat., 437, Sec. 16; act May 1, 1820, 3 Stat., 568, Sec. 2; and see Sec. 8, same act; act August 31, 1852, 10 Stat., 98, Sec. 10; act July 12, 1870, 16 Stat., 251, Secs. 5 and 6, Rev. Stat., 3690, 3691; act June 16, 1874, 18 Stat., 75; act June 20, 1874, *Id.*, 110; act 14, 1878, 20 Stat., 130.) The policy of these acts has been fully considered and approved in the Department. See House Ex.

Doc., No. 27, 2d sess., 45th Cong.; 1 Lawrence, Compt. Dec., 2d ed. App., ch. XIV, p. 579. Special provision making appropriations available for a longer period than two years has been made in some acts. (Act April 29, 1816, 3 Stat., 320; act August 31, 1852, 10 Stat., 112; act June 10, 1872, 17 Stat., 355; act June 16, 1874, 18 Stat., 75; act June 23, 1874, *Id.*, 275.)

Prior to the act of March 3, 1795 (1 Stat., 437, sec. 16), balances of appropriations were carried upon the books of the Department from year to year and were available until exhausted. Prior to the fiscal year 1871 the appropriation accounts on the ledgers of the Treasury Department were kept in continuous accounts from year to year, but after the passage of the act of July 12, 1870 (16 Stat., 251), annual accounts were opened, and have since been continued with those appropriations made for fiscal years.

The act of June 16, 1874 (18 Stat., 75), excepted certain appropriations from being carried to the surplus fund, made it the duty of certain of the accounting officers to "continue to receive, examine, and consider the justice and validity of" specified classes of claims, and required the Secretary of the Treasury to "make report of each claim allowed by them, at the commencement of each session of Congress, to the Speaker of the House of Representatives," to be laid "before Congress for consideration." The act of June 14, 1878 (20 Stat., 130, sec. 4), enlarged the act of June 20, 1874, by providing, that—

> It shall be the duty of the several accounting officers of the Treasury to continue to receive, examine, and consider the justice and validity of all claims under appropriations, the balances of which have been exhausted or carried to the surplus fund, under the provisions of said section, that may be brought before them within a period of five years. And the Secretary of the Treasury shall report the amount due each claimant, at the commencement of each session, to the Speaker of the House of Representatives, who shall lay the same before Congress for consideration: ***Provided, that*** nothing in this act shall be construed to authorize the re-examination and payment of any claim or account which has been once examined and rejected, unless reopened in accordance with existing law.

The "period of five years" mentioned in this section expired June 14, 1883. I respectfully recommend that you will call the attention of Congress to this matter, as it would seem proper that there should be some provision of law on the subject.

It may be well to consider whether it is not desirable that there should be a *permanent statute* authorizing the examination and report to Congress of all claims which arise under annual appropriations (the balances of which have been exhausted or carried to the surplus fund), and which may be brought before the proper accounting officers within six years after the appropriation was made, or perhaps more properly *within six years after the right of the claimant originated*, reserving the rights of minors and persons *non compos mentis*, and with exceptions in favor of claims evidenced by written contract or fixed in amount by statute. The act of June 14, 1878, did not prevent the payment of claims under *permanent specific appropriations*, but even as to these it may be well to consider whether there should not be some limitation fixed by statute within which they may be allowed by accounting officers. See Ward *v.* United States (10 Wall., 601); Baring Brothers & Co.'s case (4 Lawrence, Compt. Dec., 8).

THE PACIFIC RAILROADS.

The act of March 3, 1873 (17 Stat., 508, sec. 2), as carried into section 5260 of the Revised Statutes, directs the Secretary of the Treasury "to

withhold all payments to any railroad company and its assigns on account of freights or transportation [,] over their respective roads [,] of any kind, to the amount of payments made by the United States for interest upon bonds of the United States issued to any such company, and which shall not have been reimbursed, together with the five per centum of net earnings due and unapplied, as provided by law." Under this act *all* payments for transportation services rendered for the Government by the Pacific bond-subsidized railroad companies, both on their bond-subsidized lines and on roads not so aided by subsidy bonds, but owned, leased, controlled, or operated by such bond-subsidized companies, were withheld and applied to the "account of reimbursement of interest paid [by the United States] on [subsidy] bonds," from January 1st, 1873, up to the time of the sinking-fund act of May 7, 1878 (20 Stat., 58); since which, and up to the date of the Department circular, No. 83, of June 27, 1883, *all* payments were withheld, and *one-half* applied to reimburse interest, and the *other half* applied to the sinking-fund.

The Supreme Court has decided that the act of March 3, 1873 (Rev. Stat., 5260, 5261), "means nothing more or less than the remission to the judicial tribunals of the question, whether" the bond-subsidized Pacific railroad companies "have the right to recover from the Government *one-half* of what they earned by transportation; and [that] * * * the merits of such a question are determined when the *effect of the charter* [acts of July 1, 1862, 12 Stat., 489, and July 2, 1864, 13 Stat., 356] is ascertained and declared." And judgments have been rendered against the United States for *one-half* of the amount of compensation so earned both before and since March 3, 1873. (United States *v.* Union Pacific Railroad Co., 91 U. S., 91; Union Pacific Railway Co. *v.* United States, 16 Ct. Cl., 353.) And the decisions imply that Congress has no power to change or deny the right of the companies to demand payment of *one-half* of such compensation for transportation services on bond-subsidzed roads, but that such half may be set apart as a *sinking fund*, as required by the act of May 7, 1878, 20 Stat., 58. (Sinking fund cases, 99 U. S., 700; Union Pacific Railroad Co. *v.* United States, 104 U. S., 662.)

It has also been decided in principle that no part of the compensation for Government transportation rendered by bond-subsidized companies on lines of road owned, leased, controlled, or operated by them, but not aided by bond-subsidies, can be retained by the United States, either to reimburse the United States for interest paid on subsidy bonds, or to be applied under existing statutes to the sinking-fund. (Central Branch Union Pacific Railroad Co. *v.* United States, 16 Ct. Cl., 360.) And it has been decided further that the sinking-fund act of May 7, 1878 (20 Stat., 58), which requires that *one-half* of the compensation for Government transportation be withheld and applied as a sinking-fund, does not apply to *all* the bond-subsidized lines covered by the acts of July 1, 1862 (12 Stat., 489), and July 2, 1864 (13 Stat., 356), but only to "the companies to which the act [of May 7, 1878], in its terms, applies." (Pacific Railroad cases, 16 Ct. Cl., 359.)

The sinking-fund act of May 7, 1878, clearly applies to the Central Pacific Railroad Company, including the Western Pacific Railroad Company, both consolidated, and to the Union Pacific Railroad Company, now Union Pacific Railway Company. These are all covered by the acts of July 1, 1862, and July 2, 1864. As to these companies a sinking-fund has been created. The latter acts of July 1, 1862, and July 2, 1864, cover other companies which received bond subsides—the Kansas Pacific, con-

solidated with the Union Pacific January 24, 1880; the Sioux City and Pacific, and the Central Branch Union Pacific Railroad Companies—but "the sinking-fund" act does not "in terms" apply to these others and no sinking-fund has been created as to either of them.

Under the decision of the Court of Claims it follows, that, as to bond-subsidized lines not covered by the sinking-fund act, *one-half* of the compensation for transportation services rendered for the Government is, under existing statutes, to be paid to the proper company, and is not to be applied to the sinking-fund. (Pacific Railroad Cases, 16 Ct. Cl., 356,360.) Notwithstanding this, the *whole* compensation for these services on such lines has been withheld up to this time and applied on "account of re-imbursement of interest." The Department Circular, No. 83, Secretary's Office, of June 27, 1883, has made no change in this practice. Its principal feature is as follows:

> The provisions of circular No. 168 of 1879 and circular No. 55 of 1880 are modified so as to permit payments to be made for transportation services performed for any Department of the Government over such portions of the several Pacific Railroads as have not been built by the aid of Government bonds, and no payments shall be withheld from either of said railroads except for services performed for the Government over the subsized or aided portions thereof.

It thus seems to follow from the judicial decisions that the act of March 3, 1873 (Rev. Stat., 5260, 5261), has, for future purposes, been declared inoperative; that the provisions of the act of March 3, 1879 (20 Stat., 420), designed to carry out said section 5260 have been and are inoperative, so far as *they*, without reference to the sinking-fund act, might seem to require more than one-half of the compensation to be withheld; that said act of March 3, 1879, remains operative only to carry out the acts of July 1, 1862, and July 2, 1864, and the "sinking-fund" act, and for this purpose to raise the indefinite appropriations necessary "to enable the proper accounting officers to state on the books of the Treasury the accounts between the Government and said companies respectively;" that the bond-subsidized companies are asserting a right to payment of (1) *one-half* of all compensation withheld from them from the date of the act of March 3, 1873, to the date of the act of May 7, 1878, on bond-subsidized lines; (2.) the *whole* compensation on non-bond-subsidized lines owned, leased, or operated by such subsidized companies during that period and ever since; and (3) *one-half* of the compensation for transportation services on bond-subsidized lines not covered by the sinking-fund act, withheld since its date, May 7, 1878; and that the rights thus asserted call for large deficiency appropriations to meet the demands thus made, and will call for increased appropriations hereafter from the postal and other revenues of the Government.

The accounts of the several railroad companies have not been kept in the Treasury Department in a form to show separately by years, or in the aggregate, the gross amount of each of the three distinct classes of claims for payment above mentioned, but this can be ascertained by the necessary research and examination. There is appended to this report a tabular statement (Appendix A), page 343, prepared by the Auditor of the Treasury for the Post-Office Department, and "showing by years the compensation for mail transportation on the bond-subsidized portions of the Pacific railroads, and the compensation on the non-bond-subsidized portions, including all roads owned, leased, controlled, or operated by the said bond-subsidized Pacific roads, *withheld* from January 1, 1873, to June 30, 1883, and, in separate columns, showing the amount of *one-half* of the compensation withheld on the bond subsidized, and

the amount of the whole compensation withheld on the non-bond subsidized." From this has been condensed another tabular statement (Appendix B, page 352), showing an *approximate* estimate of the compensation earned for mail transportation, the payment of which has been withheld in the three classes of cases mentioned, as follows:

1. One-half compensation earned on bond-subsidized roads from January 1, 1873, to June 30, 1878	$1,753,554 79
2. Total compensation earned on non-bond-subsidized roads owned, leased, or operated by subsidized companies from January 1, 1873, to June 30, 1882	1,418 110 84
3. One-half compensation earned from July 1, 1878, to June 30, 1883, on bond-subsidized roads not covered by the act of May 7, 1878	221,572,01
Total	$3,393,237 64

It has not been practicable to obtain *data* with sufficient accuracy to give even approximate estimates as to the amount of compensation earned by the bond-subsidized railroad companies for services other than mail transportation of the three several classes, and for the separate periods mentioned. But the gross amount will probably equal, if it does not exceed, that for mail transportation. Some idea may thus be obtained of the amounts claimed by the railroad companies, and of the increase necessary in the appropriations hereafter required, if the claims of the companies are to be paid. It will, of course, become necessary to obtain exact statements of the compensation earned, if further legislative action be taken upon the subject.

The questions above referred to have been officially brought before the First Comptroller, and thus made the subjects of one decision and one opinion,* based on rulings of the courts which he regarded as conclusive, and in support of *some portions* of which some reasons were also presented by him. The judicial decisions in fact left no ground for doubt as to their meaning or effect and hence no room for any original expression of opinion by the Comptroller, whatever such expression of opinion might have been. (Mis. Doc. No. 16, 3d session, 41st Congress, January 4, 1871; House Rep. No. 440, 1st session, 44th Congress, April 25, 1876.)

These matters are brought to your notice also, because the right of the bond-subsidized companies to payment for transportation services has been the subject of some correspondence in the Department, in reference to which the decision above referred to of the Comptroller was made, and his opinion given as stated; and so that, if it be deemed advisable, the attention of Congress may be called to all the questions mentioned for such appropriate action, if any, as may be necessary or proper. It is understood that the sinking fund provided by the act of May 7, 1878, is inadequate to meet the objects of that statute. (Annual Rep. of the Commissioner of Railroads for 1882, p. 15.) The purpose of this act would be aided if Congress should provide for an enlargement of the sinking fund. But it seems just that the discretion of the Secretary should also be enlarged as to the mode of investing the sinking fund, so that, if *possible*, it should be made to yield an interest on the investment equal to that accruing on the subsidy bonds. Some provision, doubtless, should be made as to the compensation which the bond subsidized companies may be entitled to receive from the United States under the judicial decisions above mentioned. Whether this compensation, or any portion of it, can, under the Constitution, and in the exercise of good faith to the railroad companies, be applied to the sinking

* For this decision and this opinion of the Comptroller, see 4 Lawrence, Compt., Dec. p. 188, *et sequentes*.

fund, is a question which might be considered by Congress. No reason is perceived why the sinking-fund act should not be extended to all the bond-subsidized lines of roads, and in other respects be made adequate to secure its objects. It is worthy of consideration whether it might not be found advantageous to give to the companies the option to pay to the Government at any time the then present value of the principal of the subsidy bonds, on terms to be prescribed, and thus, in a large measure, avoid the difficult questions which grow out of a sinking-fund.

THE LAND-GRANT RAILROAD COMPANIES.

The Army appropriation act of June 30, 1882 (22 Stat., 120), contains a provision as follows:

> For the payment for Army transportation lawfully due such land-grand railroads as have not received aid in Government bonds, to be adjusted by the proper accounting officers in accordance with the decisions of the Supreme Court in cases decided under such land-grant acts, but in no case shall more than fifty per centum of the full amount of the service be paid, one hundred and twenty-five thousand dollars: *Provided*, That such compensation shall be computed upon the basis of the tariff rates for like transportation performed for the public at large, and shall be accepted as in full for all demands for said services: *And provided further*, That any such land-grant roads as shall file with the Secretary of the Treasury their written acceptance of this provision shall hereafter be paid for like services as herein provided; and all accounts of such railroads for services heretofore rendered shall be audited and paid as herein provided upon application of such roads and their acceptance of such sum in full of all claims for such services; and all laws inconsistent herewith are hereby repealed.

The policy of this provision extends to *all* Government transportation, and it has by force of decisions of the Supreme Court and of necessity been so applied. (Lake Superior and Mississippi Railroad Co. *v.* United States, and Atchison, Topeka, and Santa Fé Railroad Co. *v.* United States, 93, U. S., 442, 455; Land Grant Railroad Company's case, 4 Lawrence, Compt. Dec., 127.) It may be worthy of consideration, whether it is not advisable by legislation to remove all doubt upon the subject, and to provide more efficient means of determining what is the *reasonable* compensation authorized by said act, within the maximum of "fifty per centum of the full amount of the service" therein limited.

PAYMENT OF ASSIGNED CLAIMS.

Section 3477 of the Revised Statutes very wisely prohibits the assignment of claims against the United States, except as therein authorized. If officers and other persons could sell their salaries before they were earned, or witnesses in courts and such other persons could sell their claims for fees or compensation, they might be subjected to sacrifices, and much difficulty might arise in the adjustment of such claims in the Treasury Department. It is now well settled that all assignments of claims against the United States, except in rare cases, are void. (Claims-Assignment case, 4 Lawrence, Compt. Dec., 36.) In addition to this, the act of February 22, 1875 (18 Stat., 333), provides:

> That, before any bill of costs shall be taxed by any judge or other officer, or any account payable out of the money of the United States shall be allowed by any officer of the Treasury, in favor of clerks, marshals, or district attorneys, the party claiming such account shall render the same, with the vouchers and items thereof, to a United States circuit or district court, and, in presence of the district attorney or his sworn assistant, whose presence shall be noted on the record, prove in open court, to the satisfaction of the court, by his own oath or that of other persons having knowledge of the facts, to be attached to such account, that the services therein charged have been actually and necessarily performed as therein stated; and that the disbursements charged have been fully paid in lawful money.

This contemplates *actual payment in money, and generally to the original claimant*—not to an assignee, nor to any party who has purchased a claim. In adjusting the disbursing accounts of marshals it has been found that notwithstanding the plain provisions of the statutes, claims have been sold and assigned, and have been paid by the marshals to the purchasers. Congress has, in some instances, authorized payments to such purchasers, and, in others, authorized credit to be given to disbursing officers who had paid such assigned claims. (Act February 20, 1882, 22 Stat., 4; act August 5, 1882, *id.*, 260, 276; act March 3, 1883, *id.*, 596.) It does not seem advisable that any general authority should be given to accounting officers to allow disbursing officers credit for payments of assigned claims. But there may be cases in which Congress may deem it proper by special provision to authorize credit to be given in such cases to a marshal as a disbursing officer, or to authorize payments to purchasers, as for instance, in those cases in which after an appropriation has been exhausted, or for other cause, a marshal has not been supplied with funds to pay fees allowed by the proper court or commissioner, in consequence of which a necessity has arisen for the sale and assignment of claims for fees. So far as knowledge of the existence of such claims may be attainable in this office, it can be furnished if desired by either branch of Congress or by any committee thereof.

INDORSEMENTS OF INTEREST CHECKS AND TRANSFERS OF REGISTERED GOVERNMENT BONDS.

The First Comptroller, as a part of his authority in settling the accounts of the Treasurer of the United States, is required to pass upon the legal validity of all vouchers presented by that officer, including bonds of the United States redeemed, and checks for the payment of interest on registered bonds. Such interest checks are negotiable, and, in case of the death of any payee therein, or in other contingencies, questions frequently arise as to the proper party authorized to indorse and collect such checks. These are to be decided by the First Comptroller. In the same classes of cases it may happen that precisely the same questions arise as to the proper party entitled to a transfer and registry in the office of the Register of the Treasury Department of the same bonds on which such interest checks issued. The same question arising on the indorsement of interest checks, and in the transfer of bonds, should manifestly be decided in the same way. And yet it is liable to be decided differently. It is worthy of consideration, whether some provision should not be made to secure uniformity of decisions in all such cases.

ACCOUNTS OF THE COMMISSIONERS OF THE DISTRICT OF COLUMBIA.

In settling the accounts of the former Commissioners of the District of Columbia it has been found that some vouchers were for payments which were not technically and strictly authorized by law, but which would, upon an examination by Congress, probably be approved because of the manifest propriety and justice of the payments. Attention is respectfully called to this subject, so that it may receive such consideration as it may require.

STATES CHARGED WITH DIRECT TAXES.

In 1868 the First Comptroller then in office certified balances due to

the United States from several States respectively, for direct taxes due and unpaid, under the direct tax act of August 5, 1861 (12 Stat., 292), and such States were accordingly debited on the books in the office of the Register of the Treasury. It may well be doubted whether any *corporate* State was properly so charged, but as the Comptroller had jurisdiction of the subject-matter, his action, even if erroneous, cannot be treated as void by the Comptroller now in office. The result is, that money due, or which may become due, from the United States to any State so charged, to the extent of the amount so charged, cannot be paid to the State, but, by usage and law is to be applied by way of set-off. It may thus happen that some States will in this mode pay the direct tax, while others indebted in the same form will continue so indebted, and hence there will seem to be inequality, if not injustice, in the dealings between the United States and such States. The money appropriated by the act of March 3, 1883 (22 Stat., 485), "to refund to the State of Georgia certain money expended by said State for the common defense in 1877," was withheld and applied by way of set-off on the sum charged against said State for direct taxes. If it be the purpose of Congress that moneys due, or to become due, to such States shall be paid, it is respectfully suggested that provision should be made authorizing payment without reference to the charge against any such States.

Under orders of the House of Representatives, a volume of the decisions of the Comptroller for the year 1880, and one for 1881, were printed, and copies were furnished, fixed in number, and as provided by law. In addition to these, fifty copies were distributed to the Departments in sheets, as originally printed under authority of the Treasury Department. The Comptroller ordered printed, on his own account and at his own expense, a limited number of copies, which can, if desired, be furnished at cost to Departments, or be disposed of otherwise, if Congress shall, within a brief period, so direct; but, if not, they will be disposed of by the Comptroller. Attention was called to the subject of these two volumes in my last annual report, and the matter is only referred to now, as it is deemed just that the Government should have the option to take these volumes, if thought advisable.

It is due to the chiefs of divisions, clerks, and employés in this Bureau, that I should, as I do, bear testimony generally to the skill, efficiency, and fidelity with which their respective duties have been performed.

I have the honor to be, very respectfully,

WILLIAM LAWRENCE,
First Comptroller.

The Hon. CHARLES J. FOLGER,
Secretary of the Treasury.

REPORT OF SECOND COMPTROLLER OF THE TREASURY.

TREASURY DEPARTMENT,
SECOND COMPTROLLER'S OFFICE,
Washington, October 24, 1883.

SIR: In compliance with your direction, by letter of the 10th ultimo, I have the honor to submit a report, in two tabular statements, of the transactions of this office during the fiscal year which ended on the 30th day of June, 1883.

The first tabular statement shows the total number of accounts, claims, and cases of every kind settled and adjusted, and the amounts allowed thereon.

The second table furnishes a more detailed statement of the same accounts, claims, and cases, showing the character of the accounts, the source from which received, the number of each kind, and the amounts allowed. A still more detailed statement is prepared, and filed for preservation in this office, but it is deemed too voluminous for publication.

TOTAL NUMBER of ACCOUNTS and CLAIMS SETTLED.

From—	Number.	Amounts allowed.
Second Auditor	14,449	$16,982,185
Third Auditor	8,311	65,038,156
Fourth Auditor	2,549	17,292,779
	25,309	99,313,120
Various sources, not involving present expenditure	3,207	149,480
Total	28,516	99,462,600

ACCOUNTS REVISED during the year.

Character of the accounts.	Number revised.	Amounts allowed.
FROM THE SECOND AUDITOR.		
1. Of Army paymasters, for pay of the Army	261	$6,114,675
2. Of disbursing officers of the Ordnance Department, for ordnance, ordnance stores, supplies, armories, and arsenals	246	423,455
3. Of recruiting officers, for regular recruiting service	566	153,418
4. In favor of the Soldiers' Home	30	161,641
5. Of miscellaneous disbursements for contingent expenses of the Army, Adjutant-General's Office, Commanding General's Office, Artillery School, &c.	188	68,209
6. Of the National Home for Disabled Volunteer Soldiers	26	1,428,715
7. Of Indian agents' current and contingent expenses, annuities, and installments	1,058	4,847,804
Total	2,375	13,197,917
FROM THE THIRD AUDITOR.		
1. Of disbursing officers of the Quartermaster's Department, for regular and incidental expenses	1,181	9,048,393
2. Of disbursing officers of the Subsistence Department	531	3,417,420
3. Of disbursing officers of the Engineer Department, for military surveys, fortifications, river and harbor improvements, &c.	80	9,398,554
4. Of pension agents, for payment of Army pensions	109	39,506,308
Total	1,901	61,370,675

ACCOUNTS REVISED during the year—Continued.

Character of the accounts.	Number revised.	Amounts allowed.
FROM THE FOURTH AUDITOR.		
1. Of paymasters of the Navy, including paymasters at navy-yards, and as Navy agents and other disbursing officers	301	$15,496,460
2. Of disbursing officers and agents of the Marine Corps	12	796,848
3. Of Navy pension agents, for payment of pensioners of the Navy and Marine Corps	78	888,422
4. Of miscellaneous naval accounts	496	123,619
Total	887	17,025,349

CLAIMS REVISED during the year.

Character of the claims.	Number revised.	Amounts allowed.
FROM THE SECOND AUDITOR.		
1. Soldiers' pay and bounty	9,877	$928,266
2. Miscellaneous, of Army Pay Department	376	62,432
3. Miscellaneous, Indian claims	1,821	2,793,570
FROM THE THIRD AUDITOR.		
1. For lost property, paid under act March 3, 1849	464	54,959
2. For quartermasters' stores and commissary supplies, paid under act of July 4, 1864	1,592	307,615
3. State war claims, act of 1861 and other acts	7	218,922
4. For Army transportation	1,005	2,696,912
5. Miscellaneous claims	1,647	285,687
6. Oregon and Washington Territory war claims	25	3,256
7. Reimbursement, expenses of last sickness and burial of deceased pensioners	1,511	100,130
8. Claims examined and disallowed	159	.....
FROM THE FOURTH AUDITOR.		
1. For officers' and sailors' pay, bounty and prize money	1,662	267,430
Total	20,146	7,719,179

CASES ADJUSTED, NOT INVOLVING PRESENT EXPENDITURE.

	Number.	Amounts involved.
1. Duplicate checks approved	583	$33,625
2. Financial agents' accounts (naval)	4	35,268
3. Referred cases adjusted and decided	2,239	.....
4. Special settlements reported by the Second Auditor	381	80,587
Total	3,207	149,480

Bonds filed during the year	113
Contracts filed during the year	2,337
Official letters written and copied	1,744
Requisitions countersigned and recorded	18,574
Settlements recorded	12,048
Differences recorded	3,239
Clerks employed, average	70.8

It affords me pleasure to be able to report faithful performance of duty on the part of the clerical force employed in the office during the year, but I am compelled to say there are some branches of the work in which the force employed is entirely inadequate to the performance of the duties required by the needs of the public service. This is especially the case in the examination of Army paymasters' accounts, soldiers' pay and

bounty, claims and accounts of quartermasters, commissaries of subsistence, and engineers, although every available clerk having experience or skill in either of these branches of the service has been continuously engaged upon them. As was said in the letter I had the honor to address to you on the 1st instant in transmitting an estimate of the expenses of this office for the ensuing year, this condition of the work arises from several causes, the most notable of which is the great amount of new work devolved upon the office by the decision of the Supreme Court of the United States in the action relative to longevity pay of Army officers, known as the Tyler case; a decision which necessitated a careful examination of the entire military history of a majority of the officers of the Army, including an inspection of every payment of salary or allowance and every leave of absence, the officers interested having theretofore been paid by disbursing officers, and their individual accounts, in most instances, having never previously been brought directly before the accounting officers for settlement.

The settlement of the unpaid claims sanctioned by that decision was deemed more urgent than the examinations of accounts of current expenses already paid by paymasters, and their adjustment has, during ten months past, required the labor of all the clerks in the office skilled in Army pay, except those engaged on the settlement of soldiers' bounties and two clerks who have continued upon miscellaneous work of the Army Pay Division, and for this reason the settlement of paymasters' accounts has been practically suspended during that time.

The additional work made necessary by that decision cannot be completed in less than from three to five months.

A similar but less extensive additional labor was made necessary by the decision of the Supreme Court in the action known as the Temple case, in regard to the payment of mileage to naval officers for travel performed elsewhere than within the United States.

Another new and great increase in the work of the office has arisen from the circumstance that the amount of clerical force employed in the Second Auditor's Office has enabled that officer during the year past to settle and transmit to this office for decision a very much larger number of claims of soldiers and their heirs for pay and bounty on account of services rendered during the rebellion than has been transmitted during any one of several preceding years. Until recently the number of these claims so transmitted by the Auditor has been substantially the same as the number decided in this office and certified to the Secretary of War, and the extent of this increase of work will be seen from a statement of the number so decided annually since 1876.

In the year ending June 30, 1877, the number decided and certified in this office was 4,252; in 1878, 3,988; in 1879, 3,765; in 1880, 4,520; in 1881, 4,367; in 1882, 5,412; in 1883, 9,877; those settled during the last fiscal year being more than double (and in exact number 5,491 in excess of) the average number settled annually from 1876 to 1881, and nearly double the number settled in the year ending June 30, 1882.

The amount of additional labor thus bestowed on this class of cases will be appreciated when it is remembered that a large part of them are claims for both pay and bounty, requiring not only an examination of the soldier's military history, but also of all payments heretofore made on account of his services.

To these causes must be added the effect of increased work now being done in the Pension Bureau.

When accounts can be examined administratively and by the accounting officers soon after the transaction of the business to which they relate,

while proof is attainable of the actual facts relative to the contracts, the manner of their fulfillment, and the payments actually and legally made, the settlements can be made with very much less labor and expense and with very much greater certainty than is possible when the accounts have remained unsettled during several years; and their early settlement is otherwise of the greatest advantage both to the public and to individuals.

While it is the case, as above stated, that Army paymasters' accounts have remained almost untouched for ten months, it is also true that up to ten months ago great progress had been made during several years in bringing the time of their settlement nearer to the time of the transactions to which they relate, and great progress has been made in that respect by the administrative officers of the Government generally, and by the accounting officers in most of the accounts and claims settled in this office.

As an illustration I may state, in regard to the settlement of the accounts of all disbursing officers in the Indian service, that in all the accounts of that class settled in this office during the year ending June 30, 1878, the average time between the dates on which the accounts were respectively filed in the office of the Commissioner of Indian Affairs and the dates of their respective settlements in this office was seven years and one month; in all accounts of this class settled in this office during the year ending June 30, 1882, such average time was four years and seven days; and in those settled in this office during the last fiscal year the average time between the date of filing the account with the Commissioner and the date of its settlement in this office was one year eleven months and nine days.

Similar advances in this respect, but in most cases not so great, have been made in nearly all other branches of the public business assigned by law to this office.

In addition to what has been said of the already settled claims of soldiers and their heirs for pay and bounty on account of services rendered during the war, it seems proper to refer to the condition of unsettled claims of that class. At the commencement of the year ending June 30, 1882, there were 354 of these claims pending in this office, and since that time the Second Auditor has been able to transmit a greater number than this office has been able to examine and decide, so that the number pending in this office on the first of this month was 2,517. The number then pending in the Second Auditor's office was, I am informed, 37,391, making a total of 39,908 pending before the accounting officers. Very many of these claims have been pending several years, and in those cases no reason appears for doubting their having been presented in good faith and upon reasonable grounds; but claims of this class are now being presented from day to day, and I am informed that the number presented since the 1st of January last exceeds the number the Second Auditor has been able to settle within the same time by 4,900.

In a large proportion of those recently filed it is found, upon examination, that everything due has been paid, either directly by paymasters on company rolls or other vouchers, or on settlements made by the accounting officers. This is found to be true of claims of some other classes originating during the war, and there seems to be a prevailing opinion among persons who have given attention to this subject that some new legislation is needed in the nature of a statute of limitation on the presentation of claims.

Because claims growing out of the war have to a great extent become claims of widows and heirs, there may be difficulty in devising any

effective statute of direct limitation that will not operate harshly upon claimants of this class; but it has occurred to me that if you should see cause to recommend an enactment that would effectively prohibit any agent or attorney from receiving compensation for services in cases hereafter filed in this Department, more than a specified number of years after the origin of the claim, the recommendation would strike at the root of all that is most objectionable in connection with the recent presentation of claims by agents who have perhaps not even attempted to ascertain whether the claims are meritorious.

Very respectfully,

W. W. UPTON,
Comptroller.

HON. CHARLES J. FOLGER,
Secretary of the Treasury.

REPORT OF THE COMMISSIONER OF CUSTOMS.

TREASURY DEPARTMENT,
OFFICE OF COMMISSIONER OF CUSTOMS,
Washington City, D. C., October 31, 1883.

SIR: I have the honor to submit herewith for your information a statement of the work performed in this office during the fiscal year ending June 30, 1883:

Number of accounts on hand July 1, 1882	139	
Number of accounts received from the First Auditor during the year	6,602	
		6,741
Number of accounts adjusted during the year	6,634	
Number of accounts returned to the First Auditor	14	
		6,648
Number of accounts on hand June 30, 1883		93

There was paid into the Treasury from sources the accounts relating to which are settled in this office:

On account of customs	$214,706,496 93
On account of marine-hospital tax	415,945 80
On account of steamboat fees	184,188 44
On account of fines, penalties, and forfeitures	134,590 74
On account of storage, fees, &c	895,183 50
On account of emolument fees	404,103 40
On account of immigrant fund	231,476 50
On account of interest on debts due	68,553 63
On account of rent of public buildings	5,800 63
On account of mileage of examiners	2,358 70
On account of relief of sick and disabled seamen	2,049 55
On account of deceased passengers	1,050 00
On account of proceeds of Government property	15,032 87
Aggregate	217,066,830 69

And there was paid out of the Treasury on the following accounts, viz:

Expenses of collecting the revenue from customs	$6,591,224 51
Excess of deposits	4,367,838 85
Debentures	2,257,730 33
Construction, &c., of public buildings	2,694,228 63
Construction and maintenance of lights	2,224,432 30
Construction and maintenance of revenue cutters	944,819 26
Life-saving stations	746,649 19

Marine-hospital service	$461, 1
Expenses of regulating immigration	127, 3
Detection and prevention of frauds upon the customs revenue	76, 6
Compensation and expenses of the Tariff Commission	09, 0
Inspection of neat cattle shipped to foreign ports	52, 2
Compensation in lieu of moieties	25, 3
Protection of sea-otter hunting grounds and seal fisheries in Alaska	20, 0
Salaries and expenses of agents at seal fisheries in Alaska	11, 0
Metric standard weights and measures	4, 5
Unclaimed merchandise	2, 5
Debentures and other charges	
Extra pay to officers and men who served in the Mexican war	2
Refunding moneys erroneously received and covered into the Treasury	3
Refunding duties to American company of revisers of the New Testament	1, 4
Payment to W. and J. Sloane for merchandise erroneously sold	1, 0
Relief of David Mordecai and J. Randolph Mordecai	8
Refunding duties to Schmidt & Zeigler, of New Orleans	
Refund to William Robinson, master of schooner Dreadnaught	
Refund to J. W. Bell, master of sloop Theodosia E. Bell	
Refund to R. T. Aycock, master of schooner Geo. W. Thomas	
	20, 681, 0
Deduct repayment:	
Removal of remains of R. H. Carter, late inspector of customs, from Panama to Virginia	
Aggregate	20, 680, 9

Number of estimates received and examined	
Number of requisitions issued	
Amount involved in requisitions	$16, 853, 8
Number of letters received	1
Number of letters written	1
Number of letters recorded	
Number of stubs of receipts for duties and fees returned by collectors	24
Number of stubs examined	21
Number of stubs of certificates of payment of tonnage dues received and entered	
Number of returns received and examined	3
Number of oaths examined and registered	
Number of appointments registered	
Average number of clerks employed	

I inclose herewith a statement of the transactions in bonded g during the year ending June 30, 1883, as shown by the adjusted accou

I am, very respectfully, your obedient servant,

H. C. JOHNSON,
Commissioner of Custom

The SECRETARY OF THE TREASURY.

REPORT OF THE FIRST AUDITOR OF THE TREASURY.

TREASURY DEPARTMENT,
FIRST AUDITOR'S OFFICE,
Washington, October 20, 1883.

SIR: In compliance with your letter relating to the annual report from this Bureau, I have the honor to submit the following exhibits of the business transacted in this office during the fiscal year ending June 30, 1883:

Accounts adjusted.	Number of accounts.	Amount.
RECEIPTS.		
Duties on merchandise and tonnage	1,426	$229,894,982 31
Steamboat fees	1,366	202,987 14
Fines, penalties, and forfeitures	954	136,505 10
Marine-hospital money collected	1,070	421,329 42
Official emoluments of collectors, naval officers, and surveyors	1,425	1,050,141 90
Moneys received on account of deceased passengers	89	1,349 50
Moneys received from sales of old material, &c	214	705,082 83
Miscellaneous receipts	736	920,477 33
Moneys retained from Pacific railroad companies for accrued interest on bonds	12	840,554 87
Treasurer of the United States for moneys received	4	585,081,361 49
Mints and assay offices	31	55,427,739 34
Water rents, Hot Springs, Arkansas	9	3,081 41
Immigration fund	153	97,062 50
Receipts for advertising change of name of vessels	24	378 80
Accounts of the collector of taxes for the District of Columbia for taxes collected by him and deposited with the treasurer of said District	12	1,775,018 78
Accounts of the treasurer of the District of Columbia for moneys received and deposited with the Treasurer of the United States	24	1,802,878 35
Total	8,149	828,360,880 42
DISBURSEMENTS.		
Expenses of collecting the revenue from customs	1,770	6,949,344 24
Detection and prevention of frauds on customs revenue	24	55,429 24
Debentures, drawbacks, &c	242	1,862,654 27
Excess of deposits refunded	494	5,001,701 78
Revenue-cutter service	612	866,923 48
Duties refunded, fines remitted, judgments satisfied, &c	2,482	2,168,821 05
Marine Hospital Service	475	418,282 27
Official emoluments of collectors, naval officers, and surveyors	1,422	668,100 35
Awards of compensation	243	25,219 21
Expenses in advertising change of name of vessels	24	378 80
Inspection of neat cattle shipped to foreign ports	12	7,102 07
Light-House Establishment, miscellaneous expenses	41	52,819 55
Supplies of light-houses	92	351,868 39
Repairs of light-houses	68	195,723 15
Expenses of light-vessels	34	215,500 11
Expenses of buoyage	67	264,659 10
Expenses of fog-signals	46	38,640 65
Expenses of lighting and buoyage of the Mississippi, Missouri, and Ohio Rivers	22	132,145 47
Expenses of inspection of lights	9	3,102 35
Salaries of light-house keepers	42	372,494 31
Salaries, &c., Senate and House reporters	85	57,164 60
Salaries and mileage of Senators	3	303,082 39
Salaries, officers and employés Senate	8	235,355 60
Salaries and mileage, Members and Delegates House of Representatives	21	2,814,018 97
Salaries, officers and employés House of Representatives	46	412,286 31
Salaries of employés, Executive Mansion	3	25,938 19
Salaries paid by disbursing clerks of the Departments	334	8,105,835 74
Salaries, officers and employés Independent Treasury	38	347,484 99
Salaries and expenses, reporter of Supreme Court	2	872 47
Salary, Director of Geological Survey	1	4,500 00
Salaries and expenses, special inspectors foreign steam vessels	22	7,225 84
Salaries, governors, &c., Territories of the United States	6	920 00
Salaries of the civil list, paid directly from the Treasury	2,060	604,939 43
Salaries, office of the Public Printer	4	13,861 98
Salaries, Bureau of Engraving and Printing	6	26,024 20
Salaries, Congressional Library	5	38,125 68
Salaries, standard weights and measures	2	3,816 84

Accounts adjusted.	Number of accounts.	Amount.
DISBURSEMENTS—Continued.		
Salaries, Steamboat-Inspection Service	4	$193,211 64
Salaries, special agents Independent Treasury	4	837 64
Salaries, custodians and janitors	5	202,308 36
Salaries, Agricultural Department	5	94,544 33
Salaries, Botanic Garden	9	12,841 36
Salaries and expenses, National Board of Health	20	98,765 93
Salaries of employés, public buildings and grounds	13	40,316 92
Salaries and expenses, seal fisheries	19	11,156 87
Contingent expenses, Executive Mansion	3	7,040 84
Contingent expenses, United States Senate	42	144,951 43
Contingent expenses, House of Representatives	46	216,540 03
Contingent expenses, Departments, Washington	229	356,295 93
Contingent expenses Independent Treasury	198	55,176 50
Contingent expenses, Steamboat-Inspection Service	969	38,214 77
Contingent expenses, public buildings and grounds	12	493 65
Contingent expenses, office of Public Printer	16	2,660 98
Contingent expenses, Library of Congress	8	964 49
Contingent expenses, executive offices, Territories	15	4,582 45
Contingent expenses, Mints and Assay Offices	160	6,977 34
Stationery, Treasury Department	234	67,937 05
Stationery, Interior Department	6	61,199 08
Treasurer of the United States, for general expenditures	4	543,151,984 87
Gold and silver bullion account	18	53,004,103 81
Ordinary expenses, Mints and Assay Offices	106	776,248 79
Parting and refining bullion	12	137,867 94
Coinage of standard silver dollars	28	98,819 04
Freight on bullion and coin	7	11,639 73
Transportation of silver coin	6	9,484 66
Storage of silver dollars	2	1,138 00
Re-coinage of gold, silver, and minor coins	14	35,129 21
Legislative expenses, Territories of the United States	21	145,385 05
Defending suits in claims against the United States	6	10,079 95
Examination of rebel archives	2	1,936 85
Geodetic and Coast Survey of the United States	23	308,749 71
Geological Survey of the Territories	17	129,247 13
Illustrations for report on Geological Survey	1	2,804 25
Lands and other property of the United States	6	1,257 04
Protection and improvement of Hot Springs, Ark	11	6,096 37
Reproducing plats of surveys, General Land Office	5	22,537 50
Adjusting claims for indemnity for swamp lands	6	13,837 28
Protection and improvement of Yellowstone Park	5	13,280 15
Commission to classify land and codify land laws	1	9,103 31
Depredations on public timber	7	56,524 01
Reclamation of arid and waste lands	5	7,031 03
Smithsonian Institution, expenses of	2	42,180 00
Smithsonian Institution, North American ethnology	8	19,053 12
Smithsonian Institution, Polaris report	3	435 00
Bureau of Education, distribution documents	7	3,955 76
Portraits of the Presidents	3	280 00
Compensation and expenses of the Tariff Commission	3	62,645 79
Expenses contesting seats in Congress	52	74,782 33
Expenses in connection with the illness and death of President Garfield	81	39,793 01
Expenses draping public buildings at Garfield's death	41	2,841 45
Descriptive catalogue of Government publications	97	9,155 99
Publication of Tenth Census reports	12	44,951 66
Judicial expenses, embracing accounts of United States marshals, district attorneys, assistant district attorneys, special assistants, clerks and commissioners, rent of court-houses, support of prisoners, &c	5,299	4,056,944 48
Prosecution of crimes	3	10,223 78
Suppressing counterfeiting and crime	11	54,352 06
Punishing violations of intercourse acts and frauds	3	1,243 46
Investigation of frauds, Office of Commissioner of Pensions	6	102,544 27
INTEREST ACCOUNT.		
Registered stock	153	58,495,592 74
Coupons	113	9,945,381 43
District of Columbia, Washington, Georgetown, and corporation bonds	43	1,947,878 16
Navy pension fund	1	420,000 00
Louisville and Portland Canal Company's bonds	4	24,120 00
REDEMPTION ACCOUNT.		
United States bonds, called:		
Principal	14	115,153,200 00
Interest		1,222,708 64
United States bonds, purchased for sinking fund:		
Principal	13	45,404,800 00
Interest		332,080 68
United States bonds exchanged into loan of 1882 3 per cent.:		
Principal	9	303,177,550 00
Interest		39,332 25

Accounts adjusted.	Number of accounts.	Amount.
DISBURSEMENTS—Continued.		
Refunding certificates:		
Principal	12	$118,550 00
Interest		17,268 21
Certificates of deposit	24	25,922,400 00
District of Columbia stock:		
Principal	2	144,550 00
Interest and premium		19,896 54
Louisville and Portland Canal Company's bonds	1	1,000 00
Notes, one and two years, compound interest, 7.30s and Treasury, and war bounty scrip:		
Principal	44	11,490 00
Interest		2,039 15
Legal tender notes destroyed	14	132,169,003 00
Fractional currency destroyed	14	75,035 75
Old demand notes destroyed	12	710 00
Silver certificates destroyed	14	13,138,360 00
Redemption worn and mutilated United States notes	38	48,976 62
Expenses of national currency	45	58,073 92
Distinctive paper for United States securities	3	33,334 77
Purchase of bonds for sinking fund, Pacific Railroads	1	552,636 00
Outstanding drafts and checks	103	30,646 93
Judgments of the Court of Claims	42	554,943 78
Public printing and binding	159	2,444,957 53
Labor and expenses of Engraving and Printing	12	724,880 18
Post-Office Department requisitions	5	206,309 60
Postage	28	159,421 41
Telephonic and telegraphic connection between the Departments	12	1,421 59
Life-Saving Service	166	592,548 47
Establishing Life-Saving Stations	25	16,227 10
Fish-hatching establishment	1	5,001 45
Propagation of food-fishes	7	136,404 03
Illustrations for report on food-fishes	4	1,107 23
Inquiry respecting food-fishes	6	4,500 02
Steam-vessels (food-fishes)	9	136,259 72
Construction of fish pond on Monument lot	3	3,661 36
Construction of custom-houses and post-offices	278	1,310,299 51
Construction of court-houses and post-offices	426	1,803,415 09
Construction of National Museum	6	2,352 14
Construction of building for State, War, and Navy Departments	11	220,852 02
Construction of barge office, New York	16	51,297 82
Construction of light-houses	74	174,160 18
Construction of building for Bureau of Engraving and Printing	5	4,623 24
Construction of extension of Government Printing Office	4	3,571 44
Construction of marine hospitals	18	72,967 28
Construction of penitentiary building, Dakota	5	16,731 90
Construction of building for Agricultural Department	3	31,173 95
Construction of Pension Office building	2	16,189 76
Construction of steam tenders	11	27,615 68
Construction of light-ships	4	14,741 57
Construction and repair of revenue vessels	21	92,051 99
Construction of Senate stable and engine-house	3	177 00
Construction of elevator, &c., Department of Justice	2	7,577 90
Construction of elevator Interior Department	2	7,500 00
Construction of elevator and steam machinery, Senate	3	8,338 81
Reconstruction of Interior Department building	4	44,951 24
Plans for public buildings	5	4,005 89
Completion of Washington Monument	12	179,237 28
Repairs of the Interior Department building	6	10,068 84
Repairs, fuel, &c., Executive Mansion	13	58,398 47
Annual repairs of the Capitol	7	78,309 44
Annual repairs of the Treasury Department	12	20,086 46
Repairs and preservation of public buildings	27	102,100 36
Heating apparatus for public buildings	22	78,283 40
Rent of buildings in Washington	28	76,423 42
Fuel, lights, and water for public buildings	49	434,272 55
Furniture and repairs of same for public buildings	37	177,235 48
Vaults, safes, and locks for public buildings	11	27,543 54
Lighting, &c., Executive Mansion	13	15,388 69
Lighting the Capitol Grounds	5	37,374 73
Fuel, lights, &c., Department of the Interior	5	11,207 51
Improvement and care of public grounds	13	83,246 62
Improving Capitol Grounds	5	77,274 19
Improving Botanic Garden and buildings	13	11,601 70
Washington Aqueduct	6	14,630 09
Increasing the water supply	1	5,141 94
Repairs of water-pipes and fire-plugs	12	3,376 64
Constructing, repairing, and maintaining bridges, District of Columbia	13	2,051 94
Increase of Library of Congress	10	14,562 68

Accounts adjusted.	Number of accounts.	Amount.
DISBURSEMENTS—Continued.		
Joint select committee to provide additional accommodations for Library of Congress.	7	$5,481 52
Works of art for the Capitol	6	10,000 13
Preventing the spread of epidemic diseases	12	84,687 92
Agricultural Department:		
Experimental garden	5	8,105 77
Library	5	1,360 15
Museum	4	820 26
Laboratory	5	5,181 08
Furniture, cases, &c	4	6,807 03
Collecting statistics	5	54,014 99
Purchase and distribution of valuable seeds	5	80,704 13
Improving grounds	4	7,543 43
Printing annual report, 1881	19	55,068 76
Commission to report on the cotton-worm and Rocky Mountain locust	3	1,357 45
Experiments in tea culture	6	3,508 39
Report on forestry	5	6,228 24
Investigating diseases of swine and other domestic animals	5	15,669 44
Investigating history of insects injurious to agriculture	9	20,077 22
Machinery for and experiments in the manufacture of sugar	4	11,112 88
Examination of wools and animal fibers	5	5,345 18
Data respecting agricultural needs of arid regions, United States	1	1,054 06
Transportation agricultural and mineral specimens to Atlanta, Ga	4	3,369 89
Purchase and distribution of seeds along Mississippi River	1	20,000 00
Captured and abandoned property	2	20,000 00
Yorktown monument	6	5,020 24
Maps of the United States	2	6,000 00
Transportation of maps and reports to foreign countries	2	241 39
Reform School, District of Columbia	6	40,645 36
Freedman's Hospital and Asylum	5	53,915 94
Government Hospital for the Insane, buildings, &c	4	21,089 64
Government Hospital for the Insane, current expenses	7	310,929 29
Columbia Institution for the Deaf and Dumb, buildings, &c	3	5,134 38
Columbia Institution for the Deaf and Dumb, current expenses	4	55,253 24
Columbia Hospital for Women, current expenses	7	18,919 06
Columbia Hospital for Women, buildings and grounds	5	27,995 00
Providence Hospital	12	15,000 00
Children's Hospital	5	6,175 51
St. Ann's Infant Asylum	5	6,250 16
National Association for the Relief of Colored Women and Children	3	3,286 75
Women's Christian Association	5	6,268 13
Industrial Home School	4	5,051 28
National Soldiers' and Sailors' Orphans' Home	1	1,549 98
Maryland Institution for the Instruction of the Blind	2	2,787 00
Howard University	6	16,065 00
Howard University buildings and ground	1	9,998 00
Transfers by warrant and counter-warrant	303	286,755 08
Miscellaneous accounts	206	206,939 10
DISTRICT OF COLUMBIA ACCOUNTS.		
Refunding taxes	36	12,411 97
Washington redemption fund	33	9,320 45
Redemption of tax-lien certificates	26	3,187 01
Washington special-tax fund	33	15,878 04
Redemption paving scrip and certificates	62	4,919 47
Relief of the poor	47	31,821 97
Employment of the poor	17	53,420 90
Salaries and contingent expenses	45	167,381 57
Improvement and repairs	84	902,350 08
Constructing, repairing, and maintaining bridges	13	2,167 51
Public schools	36	404,540 92
Public schools, buildings and grounds	28	226,214 60
Metropolitan police	43	347,972 50
Fire department	44	118,051 63
Courts	59	38,342 93
Streets	59	387,598 19
Health department	29	49,086 57
Markets	22	7,330 21
Water fund	29	123,709 41
Judgments	37	81,078 58
Telegraph and telephone service	9	8,718 90
Transportation of paupers and prisoners	40	3,356 11
Washington Asylum	37	50,817 41
Georgetown Almshouse	13	1,356 40
Government Hospital for the Insane	11	30,000 00
Washington Asylum, buildings and grounds	9	157 56
Police station-houses, Washington	3	12,804 94
Miscellaneous expenses	101	41,596 82
Total	22,950	1,361,099,615 78

Number of certificates recorded	18,871
Number of letters recorded	5,248
Judiciary emolument accounts registered and referred	545
Number of powers of attorney for collection of interest on the public debt examined, registered, and filed	3,200
Requisitions answered	1,157

SUMMARY STATEMENT OF WORK OF THE OFFICE, AS SHOWN BY THE REPORTS OF THE VARIOUS DIVISIONS AND MISCELLANEOUS DESKS.

CUSTOMS DIVISION.

Comprising the Accounts of Collectors of Customs for Receipts of Customs Revenue, and Disbursements for the Expenses of Collecting the same, and also including Accounts of Collectors for Receipts and Disbursements in connection with the Revenue-Cutter, Steamboat, Fines, Light-House, and Marine-Hospital Service, with Accounts for Official Emoluments, Debentures, Refunds of Duties, Sales of Old Materials, and Miscellaneous Disbursements.

	Number of accounts.	Amount.
Receipts	8,048	$233,426,669 72
Disbursements	7,471	17,374,645 80
Total	15,519	250,801,315 52

JUDICIARY DIVISION.

Comprising the Accounts of District Attorneys, Marshals, Clerks, and Commissioners, Rents, and Miscellaneous Court Accounts.

	Number of accounts.	Amount.
Disbursements	5,299	$4,056,944 48

PUBLIC DEBT DIVISION.

Public Debt Division, comprising all Accounts for Payment of Interest on the Public Debt, both Registered Stock and Coupon Bonds, Interest on District of Columbia Bonds, Pacific Railroad Bonds, Louisville and Portland Canal Bonds, Navy Pension Fund, Redemption of United States and District of Columbia Bonds, Redemption of Coin and Currency Certificates, Old Notes and Bounty Scrip, and Accounts for Notes and Fractional Currency destroyed.

	Number of accounts.	Amount.
Interest accounts	314	$70,832,972 33
Redemption accounts	173	636,950,573 22
Total	487	707,783,545 55

WAREHOUSE AND BOND DIVISION.

STATEMENT of TRANSACTIONS in BONDED MERCHANDISE, as shown by ACCOUNTS ADJUSTED during the fiscal year ending June 30, 1883.

Number of accounts adjusted	1,036
Number of reports of "No transactions" received, examined, and referred	558
Balance of duties on merchandise in warehouse per last report	$14,305,427 68
Duties on merchandise warehoused	90,361,618 19
Duties on merchandise rewarehoused	2,043,739 16
Duties on merchandise constructively warehoused	40,885,457 89
Increased and additional duties, &c	2,390,534 81
Total	149,986,777 73
Contra:	
Duties on merchandise withdrawn for consumption	80,345,058 96
Duties on merchandise withdrawn for transportation	5,006,394 93
Duties on merchandise withdrawn for exportation	39,367,650 98
Allowances for deficiencies, damage, &c	3,248,978 31
Duties on withdrawals for construction and repair of vessels	180,117 55
Duties on bonds delivered to district attorneys for prosecution	4,487 15
Balance of duties on merchandise in warehouse	21,834,089 85
Total	149,986,777 73

MISCELLANEOUS DESKS.

No. 1.—*Comprising Accounts of Disbursing Clerks of the Departments for Salaries, Salary Accounts of the various Assistant Treasurers, and of the Congressional Library, Public Printer, and Executive Office, Accounts for Salaries of the Officers and Employés, House of Representatives, and the Accounts relating to the Coast Survey.*

	Number of accounts.	Amount.
Disbursements	459	$9,395,446 64

No. 2.—*Comprising the Accounts of the Disbursing Clerks of the Departments for Contingent Expenses, Contingent Expenses of the House of Representatives and Assistant Treasurers, Accounts of the Geological Survey, National Board of Health, and a very great Number of Miscellaneous Accounts.*

	Number of accounts.	Amount.
Receipts	9	$3,061 41
Disbursements	1,017	3,533,616 95
Total	1,026	3,536,698 36

No. 3.—*Comprising Accounts for Construction of Custom-Houses, Post-Offices, Court-Houses, and other Public Buildings; Accounts of Light-House Engineers and Inspectors; Accounts of the Public Printer; Steamboat Inspection and Life-Saving Service; the Accounts of the Government Hospital for the Insane, Columbia Hospital for Deaf and Dumb, and many Charitable Institutions.*

	Number of accounts.	Amount.
Receipts	17	$841,986 39
Disbursements	2,915	11,522,876 26
Total	2,932	12,364,862 65

No. 4.—*Comprising the Account of the Treasurer of the United States for General Expenditures; the Salary and Mileage Accounts for the Senate and House of Representatives, and the Accounts for Contingent Expenses of the United States Senate.*

	Number of accounts.	Amount.
Receipts	4	$536,081,361 49
Disbursements	78	546,669,293 26
Total	82	1,081,750,654 75

No. 5.—*Comprising the Accounts of Mints and Assay Offices; Salaries of the Civil List paid directly from the Treasury on First Auditor's Certificates, Captured and Abandoned Property Accounts; Accounts for the Legislative and Contingent Expenses of the United States Territories and Transportation of United States Securities.*

	Number of accounts.	Amount.
Receipts	35	$56,429,884 33
Disbursements	2,573	55,581,968 65
Total	2,608	111,011,852 98

No. 6.—*Comprising the accounts of the District of Columbia.*

	Number of accounts.	Amount.
Receipts	36	$3,577,897 08
Disbursements	1,005	3,135,598 65
Total	1,041	6,713,495 73

No. 7.—*Under the Chief of the Warehouse and Bond Division, and Comprising Judgments of the Court of Claims. Outstanding Liabilities, Postal Requisitions, Transfer of Appropriations, &c.*

	Number of accounts.	Amount.
Disbursements	1,646	$2,045,679 49

* * * * * * *

In presenting the foregoing exhibit of the official work in the Bureau during last fiscal year, I most earnestly call your attention to recommendations made in the last annual report from this office.

The continued increase of labor demanded each year over the one preceding admonishes me that should I fail to direct your attention to the absolute necessity for relief I would be justly censurable for neglect of a public duty.

An examination of the comparative statement by fiscal years, &c. (page 10), since 1861, will convince the most skeptical that the requirements of the service in this office for former years are *not adequate* to the pressing necessities of the present year.

When it is remembered that no increase in the clerical force has been made by Congress for over three years, it will be readily understood why I have been compelled to ask of you special detail of clerks to aid in the current work pressing for settlement in this Bureau.

During the last four years the official work required has increased *over twenty per cent.* This increase has created the necessity of requiring more work of the clerical force each year than formerly, and it is feared that the rapid and hurried examination of accounts presented may result in grave errors in audit and certificates issued from this office in settlement of claims, &c., pressed for final adjudication.

I have the honor, therefore, to make recommendation and urgent appeal for an increase of the clerical force in this Bureau by the action of Congress, as follows:

One clerk of class four.

Two clerks of class three.

Three clerks of class two.

Four clerks of class one.

The increase now asked for is less than 18 per cent. of the present clerical force, while the *actual increase* of work during the last four years has been nearly 24 per cent., as shown by the number of accounts examined and adjusted, the number of certificates recorded, and letters written in each year (1880, 1881, 1882, 1883).

The urgent necessity of further supervision of accounts, &c., examined and stated on what are noted as "miscellaneous desks" still exists; yet I find it impossible to make assignment of "*a clerk in charge*" of the proposed division in this Bureau, on account of greatly increased demands upon the present force of the office.

In view of the embarrassment caused by inadequate clerical force as herein stated, I have the honor to request that you will approve the recommendation for additional number of clerks, and forward the estimate to Congress, asking for favorable consideration.

I desire to heartily commend the Deputy First Auditor, Chiefs of Divisions, clerks, and employés for prompt and intelligent discharge of duty during the year.

Respectfully, &c., your obedient servant,

R. M. REYNOLDS,
Auditor.

Hon. CHARLES J. FOLGER,
Secretary of the Treasury.

REPORT OF THE SECOND AUDITOR OF THE TREASURY.

TREASURY DEPARTMENT,
SECOND AUDITOR'S OFFICE,
Washington, October 3, 1883.

SIR: In compliance with your request of the 10th ultimo, I have the honor to submit my report for the fiscal year ending June 30, 1883, showing the work performed during that period and the condition of the public business intrusted to my charge at the close of the year.

BOOKKEEPERS' DIVISION.

The following statement of amounts drawn from and repaid to the War Department appropriations on the books of this office is furnished pursuant to section 283 of the Revised Statutes, which requires that the auditors charged with the examination of the accounts of the Department of War shall annually report to the Secretary of the Treasury the application of the money appropriated for that Department. To this statement are added the drafts and repayments on account of the appropriations for the Indian service, without which the record of the financial transactions of the office would be incomplete:

Appropriations.	Drafts.	Repayments.
Under immediate control of the Secretary of War.		
Artillery school, Fort Monroe, Va	$5,000 00	$1 60
Contingencies of the Army	27,211 39	535 20
Expenses of military convicts	7,544 57	.....
Publication of official records of the war of the rebellion	33,490 00	3 32
Removal of the remains of Major-General George Sykes	.....	569 26
Under control of the Commanding General.		
Expenses of the Commanding General's office	2,500 00	.....
Under control of the Adjutant-General.		
Bounty to volunteers and regulars on enlistment	.....	25 00
Collecting, drilling, and organizing volunteers	647 21	97 76
Draft and substitute fund	87 13	.....
Expenses of recruiting	102,008 15	1,577 57
Contingencies of the Adjutant-General's department	2,800 00	83 27
Under control of the Quartermaster-General.		
Clothing, camp and garrison equipage	.....	35 71
Under control of the Surgeon-General.		
Appliances for disabled soldiers	500 00	360 00
Artificial limbs	105,051 16	9,900 94
Medical and hospital department	203,743 82	4,202 28
Medical Museum and library	10,000 00	.....
Twenty per cent. additional compensation	139 32	.....
Trusses for disabled soldiers	21 00	.....

Appropriations.	Drafts.	Repayments.
Under control of the Paymaster-General.		
Bounty under the act of July 28, 1866	$80,000 00	$6,334 75
Bounty to volunteers, and their widows and legal heirs	240,821 20	6,876 97
Bounty to the Fifteenth and Sixteenth Missouri Cavalry	7,000 00	
Collection and payment of bounty, &c., to colored soldiers and seamen	2,900 00	76 87
Extra pay to officers and men who served in the war with Mexico	500 00	21 00
General expenses	8,266 73	18,308 73
Mileage	35 54	6,285 47
Pay, &c., of the Army	12,776,429 15	434,536 88
Pay of the Military Academy	198,011 89	2,380 80
Pay of two and three year volunteers	148,256 70	15,876 22
Pay of volunteers (Mexican war)	476 49	
Pay of Florida volunteers	680 20	
Pay of mounted riflemen under Col. John C. Frémont in 1846	206 66	
Payment of expenses under reconstruction acts	2,854 07	
Traveling expenses of California and Nevada volunteers	155 12	
Traveling expenses of the First Michigan Cavalry	350 34	
Under control of the Chief of Ordnance.		
Armament of fortifications	85,127 95	135 13
Arming and equipping the militia	141,924 05	34,324 04
Allowance for reduction of wages under the eight-hour law	30 56	
Benicia Arsenal, California	24,025 00	
Examination of heavy ordnance and projectiles		535 23
Manufacture of arms at national armories	351,000 00	1,000 00
Manufacture or purchase of magazine guns	6,000 00	
Magazine for storing gunpowder	16 00	
Ordnance service	114,947 83	2,625 11
Ordnance, ordnance stores, &c	395,452 00	670 56
Ordnance material, proceeds of sales, including $7,500 for a statue or monument to the memory of Gen. James A. Garfield (act March 11, 1882)	82,500 00	
Powder and projectiles (act March 3, 1881)	40,640 00	
Powder depot	75,000 00	
Repairs of arsenals	40,000 00	6 86
Rock Island arsenal	386,000 00	
Rock Island bridge	9,250 00	
San Antonio arsenal	21,455 00	
Sea-coast batteries for instruction of militia	5,000 00	
Springfield arsenal	16,000 00	
Testing machine	10,000 00	3,235 54
Miscellaneous.		
Relief of sundry persons	2,953 57	60
Support of National Home for Disabled Volunteer Soldiers	1,122,088 03	
Support of the Soldiers' Home	147,804 42	5 60
Soldiers' Home, permanent fund (act March 3, 1881)	15,129 66	
Total drafts and repayments (War Department)	17,065,980 41	550,727 26
Appropriations for the Indian service.		
Additional beef for Indian service	139,523 81	54
Appraisal and sale of Otoe and Missouria lands	3,900 00	
Buildings at agencies and repairs	26,280 76	2,386 14
Civilization fund (14 Statutes, 688)	14,301 71	20,135 59
Contingencies of the Indian Department	53,499 78	6,841 39
Expenses of board of Indian commissioners	8,820 53	
Expenses of special agent for Miamies of Indiana	1,059 43	
Expenses of Ute commission	14,713 32	360 06
Fulfilling treaties with Indian tribes	973,629 74	39,976 51
Fulfilling treaties with Indian tribes (proceeds of lands)	45,606 06	
Gratuities and payments to Indians	7,250 00	179 70
Incidental expenses	202,930 58	16,215 57
Indian school buildings	7,709 50	
Interest on trust funds, &c	608,323 00	7,352 25
Investigating Cherokee disputes	2,500 00	
Kaskaskia, Peoria, Wea, and Plankeshaw fund	15,000 00	
Negotiating with Sioux for modification of treaty	9,026 79	
Payment to Creeks for lands occupied by Seminoles	175,000 00	
Payment to Flatheads removed to Jocko Reservation	5,000 00	
Payment to North Carolina Cherokees	5,446 96	
Pay of Indian agents	91,270 11	1,507 63
Pay of inspectors	16,734 82	611 41
Pay of Indian police	75,767 46	1,632 70
Pay of interpreters	19,639 05	2,114 77
Proceeds of Sioux reservations in Minnesota and Dakota	74,127 55	440 93
Relief of sundry individuals	26,107 87	
Reimbursement to Creek orphan fund, &c	315,105 83	

Appropriations.	Drafts.	Repayments.
Appropriations for the Indian service—Continued.		
Removal and support of Indians	$164,662 28	$1,100 58
Reservoir at headwaters of the Mississippi River, &c	15,966 90	15,466 90
Support of schools, &c	175,242 35	16,184 58
Support of various Indian tribes and bands	3,788,050 19	69,996 06
Telegraphing and purchase of Indian supplies	50,786 85	2,123 70
Transportation of Indian supplies	388,473 05	4,718 52
Traveling expenses of inspectors	8,866 77	1,519 40
Vaccination of Indians	700 75	
Miscellaneous items	12,769 84	768 28
Total drafts and repayments (Indian Department)	7,574,573 64	211,783 30

GENERAL BALANCE SHEET of APPROPRIATIONS.

	War.	Indian.
DEBIT.		
To amount withdrawn from the Treasury, July 1, 1882, to June 30, 1883	$17,065,980 41	$7,574,573 64
To amount of transfer warrants issued to adjust appropriations	100,388 33	158,947 19
To unexpended balances carried to the surplus fund	298,349 66	165,616 41
To aggregate amount of balances remaining to the credit of all appropriations on the books of this office, June 30, 1883	2,669,727 50	13,076,535 93
Total	20,134,445 90	20,975,673 17
CREDIT.		
By balances to the credit of all appropriations, July 1, 1882	1,478,536 60	11,503,569 72
By amount of repayments during the year	550,727 26	211,783 30
By amount of counter warrants issued to adjust appropriations	109,329 63	415,438 41
By amount of appropriation warrants issued during the year	17,995,852 41	8,844,881 74
Total	20,134,445 90	20,975,673 17

The balance remaining to the credit of Indian appropriations is made up as follows:

Indian trust funds deposited in the Treasury in lieu of investment under the act of April 1, 1880	$9,347,079 10
Proceeds of Indian lands on deposit in the Treasury	1,530,187 23
Annual and permanent appropriations	2,199,269 60
Total	13,076,535 93

The amount of appropriation warrants issued on account of the Indian service consists of the following items:

Appropriations for the fiscal year 1883	$5,810,301 55
Interest on investments, net proceeds of lands, &c	556,253 96
Amount derived from sales of lands	1,108,304 21
Appropriations to supply deficiencies	973,941 98
Appropriation to reimburse the Creek orphan fund	338,912 17
Appropriation to carry out agreements with Crows, and Shoshones and Bannocks	31,000 00
Special acts of relief	26,167 87
Total	8,844,881 74

The following is a summary of the work performed in the bookkeepers' division, incidental to keeping the accounts of the office:

Requisitions registered, journalized, and posted, 5,678; settlements recorded, journalized, and posted, 4,128; settlements made in the division chiefly to adjust and close accounts, 215; statements of balances, &c., furnished to settling clerks, 2,449; certificates of deposit listed and indexed, 1,188; repay requisitions prepared for the War and Interior De-

partments, 479; appropriation warrants recorded and posted, 49; official bonds of disbursing officers entered, 85; certificates of non-indebtedness issued in cases of officers and enlisted men, 2,087; letters written, 803; amount drawn from the Treasury on settlements made in this division, $389,528.14.

PAYMASTERS' DIVISION.

The number of paymasters now on disbursing duty whose accounts, rendered monthly, are settled in this division is forty-eight. The average number of clerks employed during the year was fifteen, of whom seven were engaged on accounts, five on longevity claims, and three on miscellaneous matters. The following is a summary of the year's work:

	Paymasters' accounts.	Longevity claims.
On hand unexamined July 1, 1882	502	1,083
Received during the year	583	393
Total	1,085	1,476
Audited and reported to the Second Comptroller	469	1,406
On hand not examined June 30, 1883	616	70

The amount involved in 469 disbursing accounts, 1,406 claims, and 228 miscellaneous settlements was $11,572,804.65, as follows:

Amount disbursed by paymasters	$10,768,654 40
Amount paid to officers of the United States Army under the decision of the Supreme Court in the matter of computing "longevity" pay.	626,002 11
Amount paid to the Soldiers' Home	83,751 92
Amount transferred to the books of the Third Auditor's office on account of tobacco sold to soldiers, stoppages for subsistence, property, &c.	80,566 84
Charges on account of overpayments	6,814 06
Amount of overpayments refunded	1,677 09
Sundry charges and credits	5,338 23
Total	11,572,804 65

The service records of 1,389 officers have been re-examined to determine their pay status under the acts of June 13, 1878, and February 24, 1881.

The record of deposits by and repayment of deposits to enlisted men of the Regular Army, under the act of May 15, 1872, shows that 7,444 deposits were made, amounting to $441,637.26, and that 7,457 deposits, amounting to $384,864.82, were repaid to soldiers on their discharge from the service. During the five years that this record has been kept, the deposits have aggregated $2,203,917.50, and the repayments, exclusive of interest, $1,512,157.95.

Letters received, 966; letters written, 3,594.

MISCELLANEOUS DIVISION.

The accounts of the following classes of disbursing officers are adjusted in this division: recruiting officers, 31; ordnance officers, 21; medical officers, 4; assistant adjutant-generals, 11; paymasters who pay arrears of pay and bounty to colored soldiers, 2; the acting treasurer of the National Home for Disabled Volunteer Soldiers; the disbursing clerk of the War Department; the aide to the General of the Army, who disburses the special appropriation for expenses of the commanding-general's office, and the disbursing officer of the artillery school, Fort Monroe. In addition to settling the accounts of these seventy-three

disbursing officers (all rendered monthly, except the accounts of the disbursing clerk of the War Department), this division certifies the claims of contract and other physicians for attendance on enlisted men of the Signal Service, and officers and soldiers on detached service, and the accounts of State penitentiaries in which military convicts are confined. Special settlements are made charging officers with ordnance stores sold to them for their personal use, and with the value of stores lost, damaged, or not accounted for, and a record is kept of payments to commissioned officers. During the past year seven clerks were employed on this record, four on accounts and claims, and one in recording and indexing the general correspondence of the office which was transferred to this division on July 1, 1882.

The following statements show the number of accounts received, examined, and remaining on hand, and the amount of disbursements involved:

Unsettled accounts on hand July 1, 1882	494
Received during the year from the Secretary of War, the Adjutant-General, Surgeon-General, and Chief of Ordnance	2,101
Total	2,595
Accounts settled during the year	2,084
Remaining on hand June 30, 1883	511

The amount of disbursements allowed in the settlement of accounts was $4,019,829.88, under the following appropriations:

Arming and equipping the militia, armament of fortifications, manufacture of arms at national armories, ordnance, ordnance stores and supplies, ordnance service, and other appropriations of the Ordnance Department	$1,570,103 05
Medical and hospital department, artificial limbs, Medical Museum and library, and other appropriations of the Medical Department	603,845 93
Regular and volunteer recruiting, claims for repayment of local bounty, accounts for payment of arrears of pay and bounty to colored soldiers, &c	366,211 87
Contingencies of the Army, expenses of military convicts, publication of Official Records of the War of the Rebellion, contingencies of the Adjutant-General's Department, artillery school at Fort Monroe, Va., expenses of Commanding General's office, &c	120,861 64
Support of National Home for Disabled Volunteer Soldiers	1,358,807 69
Total	4,019,829 88

The work of compiling the pay record of officers of the Regular Army and volunteer force has progressed rapidly, 155,393 payments having been entered during the year. Incidentally, twelve double payments to volunteer officers were discovered and reported for collection.

Letters written, 2,371; letters recorded, 1,937.

INDIAN DIVISION.

There are eighty-three disbursing officers of the Indian service whose accounts, rendered quarterly, are adjusted in this division, namely: Fifty-seven Indian agents, two acting agents (officers of the Army), four special Indian agents at large, one superintendent of Indian schools, five Indian inspectors, the disbursing officer of the Board of Indian Commissioners, the superintendent of the New York warehouse, the issue clerk for the Pine Ridge and Rosebud agencies, Dakota, the Army officer in charge of the Carlisle Indian school, the superintendent of the Indian school at Forest Grove, Oregon, and nine disbursing agents temporarily employed for special purposes. With the exception of the three Army officers, all these disbursing agents give bonds to the United States in penalties ranging from $500 to $60,000.

The twenty-three clerks in this division are employed as follows: Auditing money accounts, 6; examining property accounts, 10; settling claims of contractors and others for supplies and services, 4; copying, recording, preparing transcripts of accounts for suit, and other miscellaneous work, 3. Subjoined is an exhibit of the work performed:

	Money accounts.	Property accounts.	Claims.
On hand July 1, 1882	185	376	103
Received during the year	869	460	3,492
Total	1,055	836	3,595
Settled during the year	868	757	3,527
On hand June 30, 1883	186	79	68

The amount disbursed was $7,644,889.11, as follows:

Expended by Indian agents and other disbursing officers and allowed by this office	$2,457,464 08	
Amount paid by Treasury drafts in settlement of 3,026 claims of contractors and others for supplies and services	5,187,425 03	
Total disbursements		7,644,889 11

Fifty-five transcripts of Indian agents' accounts have been forwarded to the Second Comptroller for transmittal to the Department of Justice in order that suits may be entered against the agents and their sureties. The balances declared to be due the United States in these fifty-five cases amount to $335,933.73, and consist of items disallowed by the accounting officers for reasons not necessarily incompatible with the personal integrity of the agents to be sued.

During last year the sum of $2,089.27 was recovered by suit and otherwise in settlement of the accounts of certain agents no longer in the service. Letters written, 4,487; letters recorded, 846.

PAY AND BOUNTY DIVISION.

This division is charged with the settlement of all claims for bounty and arrears of pay, except such claims as are filed by officers of the Army still in service for increased longevity allowance, which have been assigned to the Paymasters' Division.

Examining branch.

Classes of claims.	Claims pending July 1, 1882.	New claims received.	Old claims revived.	Sent to settling branch.	Disallowed.	Referred to other divisions and other offices.	Claims pending June 30, 1883.
White soldiers.							
Commissioned officers							
Enlisted men, subsequent to April, 1861—arrears of pay and all bounties	21,667	11,686	4,762	1,989	4,069	2,242	26,815
Claims for pay prior to April, 1861	227	209	12	28	171	9	240
Claims of Army laundresses, sutlers, tailors, &c	55	11	1	15	7	1	44
Colored soldiers.							
Arrears of pay and bounty	7,091	2,491	406	645	900	90	8,263
Total	29,040	14,397	2,181	2,677	5,237	2,342	35,362

Settling branch.

Classes of claims.	Claims pending July 1, 1882.	Received from examining branch.	Claims settled and allowed.	Claims disallowed.	Referred to other divisions and other offices.	Claims pending June 30, 1883.
White soldiers.						
Commissioned officers ..... Enlisted men, subsequent to April, 1861—arrears of pay and all bounties	885	1,989	2,235	40	1	598
Claims for pay prior to April, 1861	.....	28	28	.....	.....	.....
Claims of Army laundresses, sutlers, tailors, &c....	.....	15	15	.....	.....	.....
Colored soldiers.						
Arrears of pay and bounty	94	645	653	4	.....	82
Total	979	2,677	2,931	44	1	680

The claims settled and allowed averaged a fraction more than $136.93 each, the total amount being $401,363.93. The claims disallowed aggregated about $700,000. The total amount of claims allowed includes the following items: Payments under the "Tyler decision" to officers out of service and to the heirs of deceased officers, $20,199.69; payments under the decision of the Second Comptroller, dated November 25, 1881, of 33⅓ per cent. additional pay per act of March 2, 1867, $14,555.68.

Eighteen settlements were made in favor of the Soldiers' Home for $82,051.47 unclaimed moneys belonging to estates of deceased soldiers.

The clerks of this division are distributed as follows: Examining branch, 25; settling branch, 13; on Soldiers' Home accounts, 5; on old claims (Mexican war, Florida war, &c.), 2; corresponding clerks, 6; registering clerks, 3; file clerks, 6; chief of division, 1; total 61. Letters written, 102,149.

DIVISION FOR THE INVESTIGATION OF FRAUD.

On July 1, 1882, 6,868 cases remained on hand; 560 new cases have been received during the year, making a total of 7,446 before the division. Of these, 5,168 were examined and partially investigated, 1,093 were finally disposed of, and 6,353 remain on hand for further action. The cases not disposed of are as follows:

Unsettled claims:		
White soldiers	445	
Colored soldiers	1,531	
		1,976
Settled claims:		
White soldiers	783	
Colored soldiers	3,332	
Double payments to officers and enlisted men	262	
		4,377
Total		6,353

These cases involve alleged, apparent, and suspected fraud, contested heirship, forgery, criminal personation of soldiers and their heirs, illegal withholding of moneys by attorneys, over-payments, &c.

The sum of $6,944.91 has been recovered by suit and otherwise, and deposited in the Treasury; judgments amounting to $5,276.91 have been

obtained, but are not yet satisfied; $6,794.64 has been secured to claimants from persons unlawfully withholding it; $12,482.34 has been returned to the Treasury by the Pay Department in cases of colored soldiers, and fees amounting to $2,760.80 have been withheld from suspended and suspected attorneys.

Abstracts of material facts have been made in 440 cases; 30 cases were prepared for suit and criminal prosecution and transmitted to the Department of Justice, and 5,098 letters were written.

I would again invite attention to a matter that has been referred to in half a dozen annual reports, namely: The necessity for some action on the part of Congress looking to an adjustment of the claims of those colored soldiers who allege that they were defrauded of their arrears of pay and bounty by the subordinate agents of the late Freedmen's Bureau.

PROPERTY DIVISION.

The property accounts (quarterly returns of clothing, camp and garrison equipage) of eleven hundred and fifty officers are examined and finally settled by five clerks in this division. These accounts are originally rendered to the Quartermaster-General for administrative action and are by him transmitted to the Second Auditor for adjustment. During last year 3,116 returns were received which, added to 5,678 on hand July 1, 1882, made a total of 8,794 to be examined. Of these 4,433 were settled and filed away, leaving 4,356 on hand June 30, 1883, a decrease of 1,322. If this progress can be maintained the work of the division will be up to date in less than three years. Charges amounting to $3,775.70 were made against officers for property not accounted for and the sum of $2,254.91 was recovered and deposited in the Treasury. Seven hundred and eighty-three certificates of non-indebtedness were issued, chiefly to officers who served in the volunteer forces during the late war, and who have claims against the United States for horses lost in the service or for arrears of pay and allowances. Letters written, 2,795; letters recorded, 1,164.

DIVISION OF INQUIRIES AND REPLIES.

Fifteen clerks were needed to attend to the work of this division, of which the following is a summary:

Office making inquiry.	On hand July 1, 1882.	Received.	Answered.	On hand June 30, 1883.
Adjutant-General	424	6,322	5,862	884
Quartermaster-General	11	346	313	44
Commissary-General	4	1,120	1,123	1
Commissioner of Pensions	25	4,070	3,775	320
Third Auditor	47	1,525	1,515	57
General Land-Office	3	256	256	3
Miscellaneous	.....	559	558	1
Total	514	14,198	13,402	1,310

Miscellaneous work.

Rolls and vouchers copied for the Adjutant-General, 434; letters, affidavits, final statements, certificates of disability, vouchers, &c., copied for this office and other Bureaus, 1,620; pages of foolscap used in copying, 1,791; letters written, 3,232; signatures compared, 3,672; descriptive lists of soldiers briefed and filed away, 12,212. Overpayments and double payments amounting to $4,008.09 have been brought

to light in the examination of muster-rolls and vouchers for information required from this division, and about one-half of the amount will be recovered through the Third Auditor's office by deductions from claims of enlisted men for commutation of rations while prisoners of war, and of officers and men for the value of horses lost in the service. Of the overpayments heretofore reported the sum of $2,579.41 was collected during the fiscal year, as follows: by the division for the investigation of fraud, $234; through the Third Auditor's Office, $2,345.41.

The foregoing exhibit shows an increase of 4,717 in the number of inquiries received, and that all inquiries have been answered except 1,310—the majority of which are held for information from the Paymaster-General's Office.

DIVISION OF CORRESPONDENCE AND RECORDS.

Letters received, 27,353; letters written, 15,320; letters referred to other offices, 187; letters returned uncalled for, 429; claims received, briefed, and registered, 22,493; miscellaneous vouchers received, stamped, and distributed, 76,655; letters containing additional evidence to perfect suspended claims briefed and registered, 14,215; pay and bounty certificates examined, registered, and mailed, 1,695; pay and bounty certificates examined, registered, and sent to the Pay Department, 2,059; reports calling for requisitions sent to the Secretary of War, 202; miscellaneous cases disposed of, 5,257.

The average number of clerks employed in this division was five. On July 1, 1882, the work of recording and indexing the miscellaneous correspondence of the office was transferred to the miscellaneous division, and on January 1, 1883, the pay and bounty division was charged with the duty of mailing certificates for arrears of pay and bounty, heretofore performed by this division.

ARCHIVES DIVISION.

The following is a statement of the routine business of this division:

Paymasters' accounts received from the Pay Department	$583
Confirmed settlements received from the Second Comptroller, entered, indexed, and filed: Paymasters', 76; Indian, 2,367; miscellaneous, 985	3,428
Miscellaneous accounts withdrawn for reference and returned to the files	3,356
Vouchers withdrawn from the files for use in the settlement of accounts and claims and for repairs	41,589
Vouchers returned to files	54,921
Vouchers examined and briefed	1,538,217
Mutilated and worn vouchers repaired and returned to the files	1,864
Number of pages copied	931
Letters written	369
Miscellaneous settlements examined and placed in boxes	109,842
File boxes stenciled	9,560
File boxes briefed	2,459

The necessity of a thorough revision and systematic rearrangement of the permanent files of the office has been amply demonstrated during the progress of that work since 1880. In the hurry and great press of business following the War of the Rebellion thousands of vouchers were withdrawn every month from the files by examining and settling clerks, many of them inexperienced, and it is not at all surprising that numerous cases of misfiling resulted. When it is considered that a voucher misfiled among several million is practically lost, the importance of careful handling and constant watchfulness can scarcely be overestimated. The rearranged files, when completed, will be as nearly perfect as it is possible to make them.

RECAPITULATION.

Number of accounts and claims of all kinds on hand July 1, 1882	38,440
Number of accounts and claims received during the year, including 2,181 revived claims for arrears of pay and bounty	27,592
Total	66,032
Number disposed of, including rejected and referred claims for pay and bounty	24,104
Number of accounts and claims on hand June 30, 1883	41,928
Amount drawn out of the Treasury in payment of claims and in advances to disbursing officers	$24,640,554 05
Less repayments of unexpended balances, &c	762,510 56
Net amount paid out	23,878,043 49
Total number of letters written	140,218
Average number of clerks employed	157

* * * * * * *

Notwithstanding the best efforts of the office it has been found impossible to prevent an accumulation of unfinished work. The record of accounts of disbursing officers shows an increase of 138 in the number received, 337 in the number audited, and 132 in the number remaining unsettled at the close of the year. The record of property accounts makes a more favorable showing, the number received being 751 less than last year, the number settled 550 more, and the number on hand 1,619 less than on June 30, 1882. The number of claims on hand (arrears of pay and bounty, exclusive of longevity claims of officers in the service) has increased by 4,950, the number received being 3,191 in excess of last year's returns and the number disposed of 4,842 less. It should be stated, however, that in reporting disallowed cases only those are counted that have been finally rejected by the Second Comptroller. The number actually disallowed by this office was 6,580, of which only 5,281 are included in this report—1,299 not having been acted upon by the Second Comptroller on June 30. The actual falling off in the number of cases disposed of is therefore 3,543. But it by no means follows that less work was performed in 1883 than in 1882. On the contrary the decrease in the number of cases settled was accompanied by a large increase of work. This apparent anomaly is explained by the fact that disallowed cases which, prior to January 1, 1882, were summarily disposed of by the Second Auditor, are now formally reported to the Second Comptroller; and by the further fact that all cases, whether disallowed or not, are so exhaustively examined and inquired into as to consume at least thrice as much time as was formerly considered necessary. It is not an unusual occurrence for one claim to occupy the entire time of an experienced clerk for two or three days, and then be suspended for further evidence. There are now more unsettled claims on hand than at any time since 1872. On June 30, 1873, 34,771 claims remained on hand. The number then gradually decreased until it reached 15,466 in 1877. Since that year there has been a steady increase until the unadjusted cases on June 30 numbered 36,042. At the present rate of settlement (about 12,000 per annum) it will take three years to clear off this accumulation provided no more claims be filed. But as the number presented is increasing instead of diminishing, the prospect of settling a claim within a reasonable time is somewhat remote. Since July 1 I have withdrawn five experienced clerks from other divisions of the office

in which the work, though equally important, is not so pressing, and assigned them to the pay and bounty division. But even with this increase of force the number of unsettled claims on hand on October 1, was 37,391, being 1,349 more than on June 30. Under these circumstances I feel constrained to ask for a material addition to the clerical force of the office, and I have accordingly submitted, with the annual estimate, a request for fifty more clerks.

If no addition be made to the force I shall, as heretofore, use my best endeavors for the dispatch of public business, but in justice to the great mass of claimants I shall be compelled to suspend the long established rule of the office which permits a case to be made special, or advanced by request, and to insist upon each claim being taken up in its proper order, according to date of presentation, departing from this course only upon satisfactory evidence that the claimant is in destitute circumstances and suffering for want of pecuniary aid.

The great increase in the number of applications for arrears of pay and bounty is something anomalous, and when it is stated that not one in ten of the applications now being filed possesses any merit, the inquiry is naturally suggested why, at this late period—nearly twenty years after the war—so many claims are filed, and the number increasing. The following table shows the number filed in each month of the last fiscal year:

Month.	New claims.	Old claims revived.	Total.
1882.			
July	1,049	36	1,085
August	1,023	121	1,144
September	948	109	1,057
October	503	117	620
November	1,091	102	1,193
December	1,321	120	1,441
1883.			
January	1,638	165	1,803
February	1,002	165	1,167
March	1,456	209	1,665
April	1,145	180	1,325
May	1,582	491	2,073
June	1,728	277	2,005
Total	14,486	2,092	16,578

Not one in twenty of all these claims was filed upon the suggestion or by the voluntary action of the claimant. The ordinary causes that establish the relation of attorney and client do not exist. The person who has business to transact and is ignorant of the proper manner of accomplishing it usually applies to an attorney who is supposed to be well informed upon the subject. In claims for back pay and bounty this order is, in most cases, reversed, and the attorney seeks the client. An agent is employed to solicit business in a certain section. His advent is announced by advertisement. He is armed with blanks ready to be filled up, and represents to the uninformed, more generally the colored soldiers or their heirs, that they have not been paid all that is justly due them; that some new law, or new construction of existing law, entitles them to more bounty or further pay; a small fee in advance is required, generally two or three dollars, sometimes more, in fact all that can be got, with the promise that no more will be demanded unless the claim be allowed. The fee is paid, the application filed, and in the end rejected. It is a very common thing to receive, in one package,

fifty or a hundred such claims. The attorney rarely looks after them—*it does not pay*. He has received his little advance fee, and it pays better to hunt up more victims. After a few months the deluded soldiers complain that their claims have been a long time pending and that they can hear nothing from them. They state that their attorneys do not or will not answer their letters. In this way a very large correspondence is imposed upon this office—a correspondence that costs the Government a large amount of money and benefits no one. The soldiers are swindled, and after their claims are rejected, frequently denounce the Government and its officers, who simply administer the law as they find it.

Another class of worthless claims is constantly increasing, namely, claims for bounties already paid. In many of these cases denials of former payments are made, under oath, when the records of this office, authenticated in the highest manner known to the law and the courts, show conclusively that payments were made years ago. To perjury is sometimes added forgery, and the lapse of time since the war increases the chances of success to the forgers and perjurers. Should these records be destroyed, and such a calamity is not beyond the pale of possibility, the Government would certainly be defrauded out of millions of dollars.

A STATUTE OF LIMITATION RECOMMENDED.

It is not alone with a view of protecting the Government from fraudulent claims, but also for the protection of soldiers and their representatives that I renew my former recommendation for the passage of a law of limitation. All claims growing out of the late war should be presented for payment within one or two years from the enactment of the law. There is no other way of checking the growing evils to which I have referred.

Statutes of limitation are common in all States of the Union. They apply not only to transactions between individuals, associations and corporations, but generally to transactions in which the State is a party. They are regarded as a necessary preventive of fraud and imposition; are universally commended by jurists, and no complaint of their effect is made by business men.

In 1793 Congress enacted that all claims upon the United States for services, &c., prior to March 4, 1789, should be presented before May 1, 1794, or be forever barred and precluded from settlement or allowance (1 Stats., 301). In 1863, the time for commencing suit in cases where the Court of Claims has jurisdiction was limited to six years after the claim first accrued (12 Stats., 767). This limitation, it is worthy of note, was not imposed until eight years after the establishment of the court. The time for the presentation of claims for the refundment of internal-revenue taxes erroneously or illegally assessed, is limited to two years next after the cause of action accrued (Section 3228 Revised Statutes). No action can be maintained in case of forfeiture or penalty under the copyright laws unless commenced within two years after the cause of action has arisen (Section 4968 Revised Statutes). The time for filing claims on account of collecting, drilling and organizing volunteers during the late war, and for additional bounty under the act of July 28, 1866, expired by statutory limitation on June 30, 1874, and June 30, 1880, respectively. The time for filing claims for the value of horses and equipments lost in battle will expire on January 9, 1884. All these are salutary laws, and the propriety of their enactment was never seriously questioned.

It is not to avoid the payment of just demands that a statute of limitation is recommended. A person to whom the Government is indebted is not justified in withholding the presentation of his claim until a time when the Government may be without the means of determining its justness and validity; and the Government has a right at all times to know, by a call upon its creditors, the full amount of its indebtedness.

While earnestly advocating the enactment of a statute of limitation as to claims against the United States, I beg leave to repeat the following suggestions made by me two years ago in relation to overpayments, and to the final settlement of the accounts of disbursing officers:

In view of all the circumstances connected with overpayments, it has become a question whether the Government would not really lose less by ignoring overpayments made during the war of the rebellion than by attempting to collect them; but, in the absence of legal authority to ignore them, it is the custom of this office to take action on all cases brought to its knowledge in which the Treasury has suffered by erroneous payments. I would suggest, however, that as, in my opinion, the time has arrived when all claims against the United States, growing out of the late war, should be barred by a statute of limitation, so, also, should claims by the United States against individuals be barred, with the exception, perhaps, of cases of double payment. It would doubtless be a measure of economy if Congress were to authorize the Second Auditor and Second Comptroller to make no further charges on account of overpayments prior to March 16, 1868, in cases where it is evident that payees did not knowingly and willfully obtain more than their just dues.

* * * * * * *

Practically, the sureties of a public disbursing officer are never released, and a law seems to be needed making it obligatory upon the accounting officers to prepare and transmit to the Department of Justice, within a reasonable time, transcripts of the accounts of delinquent disbursing officers and all other persons who are in arrear to the United States; suit to be entered within ten years after the officer or other person became in arrear; otherwise, the United States to be estopped as regards the sureties—the principals, however, to be held.

A PASSENGER AND FREIGHT ELEVATOR NEEDED.

The necessity of providing a passenger and freight elevator for Winder's Building has repeatedly been urged by the Secretary of War, the Secretary of the Treasury, and the Second Auditor. The three upper floors of the building, which is six stories high, is occupied by this office. We have now a force of 169 clerks, 68 of whom are ex-soldiers, many of them laboring under disabilities incurred and wounds received in the military service. The daily climbing of eight or ten flights of iron steps is not conducive to the health of any one, disabled or not. This office is visited by the public to a greater extent than any other bureau, except perhaps the Pension office, and scarcely a day passes without complaint being made of the absence of an elevator. Independently of the comfort of the clerks, an elevator is much needed for the convenience of the public.

The gentlemen employed in this Bureau are entitled to commendation for general efficiency, industry, and good conduct.

I cannot close this report without expressing my sense of the loss the office has sustained in the death of Ambrose F. Wight, chief of the Indian Division, after an honorable service of more than twenty years. During my official acquaintance with him Mr. Wight was conspicuous for integrity, ability, and strict attention to the onerous duties of his responsible position.

Very respectfully,

O. FERRISS,
Auditor.

Hon. CHARLES J. FOLGER,
Secretary of the Treasury.

REPORT OF THE THIRD AUDITOR OF THE TREASURY.

TREASURY DEPARTMENT,
THIRD AUDITOR'S OFFICE,
Washington, D. C., October 20, 1883.

SIR: I have the honor to transmit herewith report of the operations of this office for the fiscal year ended June 30, 1883. The following statement shows, in tabular form, the number and amount of accounts and claims remaining on hand unsettled at the close of the last fiscal year, the number received and audited, and the number and amount of accounts and claims remaining unsettled June 30, 1883, viz:

BUSINESS TRANSACTED in the OFFICE during the fiscal year ended June 30, 1883.

Description of accounts.	Number of accounts remaining on hand June 30, 1882.	Number of accounts received in fiscal year ended June 30, 1883.	Number of accounts settled in fiscal year ended June 30, 1883.		Number of accounts unsettled June 30, 1883.	
	Monthly and quarterly.	Monthly and quarterly.	Monthly and quarterly.	Amount involved.	Monthly and quarterly.	Amount involved.
Quartermasters' money	763	3,206	2,708	$8,820,221 42	1,261	$3,038,494 34
Quartermasters' property	783	3,912	3,812		883	
Commissaries' money	962	1,929	1,584	2,785,390 86	1,307	1,400,610 71
Pension agents' money	292	405	382	41,570,820 66	315	63,939,200 79
Engineers' money	31	247	228	12,321,749 58	50	5,681,287 74
Signal officers' money	186	297	295	491,571 12	188	758,730 80
Signal officers' property	1,055	838	1,614		279	
Montana war claims		442	402	6,631 00	40	248 00
Claims for horses lost	4,804	1,180	533	72,567 06	5,451	966,518 60
Claims for steamboats destroyed	70	10	5	14,728 00	75	702,763 87
Oregon war claims	690	24	15	862 17	699	10,434 28
Miscellaneous claims	13,515	6,892	5,079	4,079,043 11	15,328	10,442,606 15
State war claims	10	12	7	340,714 75	15	5,114,216 19
Total	23,161	19,394	16,664	70,504,299 73	25,891	92,055,111 47

BOOKKEEPER'S DIVISION.

The duty devolving upon this division is to keep the appropriation and money accounts of disbursing officers, which are settled in this office.

The annexed statement shows the amount drawn out of certain of its appropriation accounts, and also the repayments made through this office into the Treasury, and is a full exhibit of its financial operations during the fiscal year:

STATEMENT showing the FINANCIAL OPERATIONS of the OFFICE during the fiscal year ended June 30, 1883.

	Advances to officers and agents during the fiscal year.	Claims paid during the fiscal year.	Transfers not involving expenditure of money from the Treasury.	Special relief acts.	Total.
The number of requisitions drawn by the Secretaries of War and the Interior is 9,018, amounting to $107,003,080.22, and paid in the manner herein set forth, out of the following appropriations:					
Regular supplies, Quartermaster's Department	$3,526,528 97	$42,882 37	$8,651 48	.....	$3,578,062 82
Incidental expenses, Quartermaster's Department	836,812 28	13,035 54	3,713 52	.....	853,561 34
Barracks and quarters	832,338 32	11,459 96	444 78	.....	844,243 06
Army transportation	4,310,716 33	770,713 56	12,213 75	.....	5,093,643 64
Army transportation (Pacific railroads)	.....	1,663,151 30	.....	.....	1,663,151 30
Clothing, camp and garrison equipage	1,469,101 39	197 79	27 55	.....	1,469,326 73
Cavalry and artillery horses	228,850 50	15,954 00	.....	.....	244,804 50
National cemeteries	106,374 76	170 45	2,017 57	.....	108,562 78
Pay of superintendents of national cemeteries	59,795 51	30 00	.....	.....	59,825 51
Construction and repair of hospitals	80,136 33	.....	.....	.....	80,136 33
Observation and report of storms	281,207 38	247 16	2,655 69	.....	284,110 23
Fifty per cent. of Army transportation due certain land-grant railroad companies	.....	296,379 38	.....	.....	296,379 38
Observation and exploration in the Arctic Seas	53,000 00	.....	.....	.....	53,000 00
Reimbursing State and citizens of California for expenses in suppressing Modoc Indian hostilities	.....	3,827 08	.....	.....	3,827 08
Reimbursing State of Oregon for expenses in suppressing Modoc Indian hostilities	.....	70,268 08	.....	.....	70,268 08
Headstones for graves of soldiers in private cemeteries	10,000 00	8,707 35	.....	.....	18,707 35
Signal Service	10,502 50	.....	.....	.....	10,502 50
Construction, maintenance, and repair of military telegraph lines	50,001 40	.....	.....	.....	50,001 40
Refunding to States expenses incurred in raising, &c., volunteers, &c	.....	692,763 95	187 00	.....	692,950 95
Building for military quarters at Fort Leavenworth, Kans	106,956 77	.....	.....	.....	106,956 77
Building for military quarters at Fort Apache, Ariz	13,928 44	.....	.....	.....	13,928 44
Military posts for the protection of the Rio Grande frontier	66,842 20	.....	.....	.....	66,842 20
Military post at Fort McKinney, Wyo	25,000 00	.....	.....	.....	25,000 00
Military post near Musselshell River, Fort Maginnis, Mont	25,000 00	.....	.....	.....	25,000 00
Military road from Yankton to Fort Randall, Dak	5,000 00	.....	.....	.....	5,000 00
Constructing jetties and other works at South Pass, Mississippi River, Louisiana	.....	150,000 00	.....	.....	150,000 00
Twenty per cent. additional compensation	.....	1,186 29	.....	.....	1,186 29
Officers' transportation, 1871 and prior years	.....	103 10	101 68	.....	204 78
Services and supplies of Montana Volunteers in the Nez Perces Indian war	.....	9,697 00	.....	.....	9,697 00
Relief of heirs of Peter Gallagher, act June 19, 1883	.....	.....	.....	$6,128 82	6,128 82
Relief of Charles A. Luke, act Dec. 19, 1882	.....	.....	.....	1,200 00	1,200 00
Relief of Wm. Wallace Screws, act Dec. 18, 1882	.....	.....	.....	365 25	365 25
Relief of W. S. Hansell and Sons, act Feb. 22, 1883	.....	.....	.....	901 57	901 57
Relief of Joseph C. Irwin, act March 3, 1883	.....	.....	.....	8,378 46	8,378 46
Relief of Chas. H. Tompkins, act March 3, 1883	.....	.....	.....	976 00	976 00
Relief of Edward F. Brownell, act March 3, 1881	.....	.....	.....	90 00	90 00

	Advances to officers and agents during the fiscal year.	Claims paid during the fiscal year.	Transfers not involving expenditure of money from the Treasury.	Special relief acts.	Total.
Road from New Albany to National Cemetery, Indiana	$12,000 00				$12,000 00
Road from Fort Scott to National Cemetery, Kansas	3,000 00	$556 93			3,556 93
Road from Chattanooga to National Cemetery, Tennessee	5,000 00				5,000 00
Road from Mound City to National Cemetery, Illinois	10,000 00				10,000 00
Rogue River Indian war—prior to July 1, 1880		613 14			613 14
Purchase of Arlington estate		125,000 00			125,000 00
Constructing approaches to Fort Bliss, Texas	5,000 00				5,000 00
Act authorizing compensation to Company B, Fourteenth Infantry, for losses, &c., on Nashville and Chattanooga Railroad			$977 08	$5,643 54	6,620 62
Pay transportation and services of Washington and Oregon Volunteers, 1855 and 1856		5,551 81			5,551 81
Claims for quartermaster's stores and commissary supplies, act May 1, 1882		14,302 38			14,302 38
Claims for quartermaster's stores and commissary supplies, act March 1, 1883		296,335 37			296,335 37
Claims for quartermaster's stores and commissary supplies, act March 1, 1881		145 00			145 00
Reimbursement to James Burke, superintendent National Cemetery, Salisbury, N. C., act August 5, 1882				180 40	180 40
Commutation of rations to prisoners of war in rebel States prior to July 1, 1879, and July 1, 1880		32,351 58	600 17		32,951 75
Army pensions	73,644,739 84	89,933 90	846 08		73,735,519 82
Horses and other property lost in the military service, act March 3, 1849		101,877 40	3,184 20		105,061 60
Support of military prison, Fort Leavenworth, Kansas	87,538 25				87,538 25
Subsistence of the Army	2,279,670 00	3,277 64	601 18		2,283,548 82
Sundry engineer appropriations	14,363,534 49	156 61	13,542 67		14,377,233 77
Total	102,508,575 66	4,420,876 12	49,764 40	23,864 04	107,003,080 22

	Deposits.	Transfers.	Total.
The number of credit and counter requisitions drawn by the Secretaries of War and Interior on sundry persons in favor of the Treasurer of the United States is 1,162, on which repayments into the Treasury have been made through the Third Auditor's office during the fiscal year ending June 30, 1883	$8,505,637 31	$168,562 10	$8,674,199 41

QUARTERMASTER'S DIVISION.

	Money accounts.		Property returns.	Supplemental settlements.	
	Number.	Amount.		Money.	Amount.
On hand per last report	763	$1,972,292 64	783		
Received during the fiscal year	3,206	9,886,423 12	3,912	446	$237,196 35
Total	3,969	11,858,715 76	4,695	446	237,196 35
Reported during the fiscal year	2,708	8,820,221 42	3,812	446	237,196 35
Remaining unsettled	1,261	3,038,494 34	883		
Total	3,969	11,858,715 76	4,695	446	237,196 35

	Signal accounts.			Total.	
	Property.	Money.	Amount.	Number.	Amount.
On hand per last report	1,055	186	$664,964 15	2,787	$2,637,256 79
Received during the fiscal year	838	297	585,337 77	8,699	10,708,957 24
Total	1,893	483	1,250,301 92	11,486	13,346,214 03
Reported during the fiscal year	1,614	295	491,571 12	8,875	9,548,988 89
Remaining unsettled	279	188	758,730 80	2,611	3,797,225 14
Total	1,893	483	1,250,301 92	11,486	13,346,214 03

Number of letters written, 5,486; number of clerks employed, 19; number of vouchers examined, 265,358; number of pages of manuscript written, 9,253.

SUBSISTENCE AND ENGINEER DIVISION.

The transactions of the subsistence and engineer branches for the fiscal year are shown by the following statement, viz:

	Subsistence accounts.		Engineer accounts.	
	Number.	Amount.	Number.	Amount.
On hand per last report, June 30, 1882	962	$1,230,191 51	31	$4,826,589 08
Received during the fiscal year	1,929	2,955,810 06	247	13,176,448 24
Total	2,891	4,186,001 57	278	18,003,037 32
Reported during the fiscal year	1,584	2,785,390 86	228	12,321,749 58
Remaining on hand June 30, 1883	1,307	1,400,610 71	50	5,681,287 74

Number of vouchers examined, 120,525; number of letters written, 1,765; number of differences written, 1,099; number of calls answered, 2,039; number of clerks employed, 9.

CLAIMS DIVISION.

	Miscellaneous claims.		
	Number.	Amount claimed.	Amount allowed.
On hand June 30, 1882	13,515	*a*$9,312,165 13	.....
Received during the year	6,892	*b*5,209,484 13	.....
Total	20,407	14,521,649 26	.....
Disposed of during the year	5,079	*c*4,079,043 11	$2,978,568 08
On hand June 30, 1883	15,328	*d*10,442,606 15	.....

	Washington and Oregon Indian war claims.		
	Number.	Amount claimed.	Amount allowed.
On hand June 30, 1882	690	$6,047 25	.....
Received during the year	24	4,663 03	.....
Total	714	10,710 28	.....
Disposed of during the year	15	276 00	$862 17
On hand June 30, 1883	699	*e*10,434 28	.....

	Lost vessels, &c., act March 3, 1849.		
	Number.	Amount claimed.	Amount allowed.
On hand June 30, 1882	70	$672,903 87	
Received during the year	10	44,588 00	
Total	80	717,491 87	
Disposed of during the year	5	14,728 00	$4,640 00
On hand June 30, 1883	75	702,763 87	

[a] This is the amount claimed in 11,868 cases, the amount claimed in the other 1,647 cases not being stated.
[b] This is the amount claimed in 4,865 cases, the amount claimed in the other 2,027 cases not being stated.
[c] This is the amount claimed in 4,918 cases, the amount claimed in the other 161 cases not being stated.
[d] This is the amount claimed in 11,815 cases, the amount claimed in the other 3,513 cases not being stated.
[e] This is the amount claimed in 328 cases, the amount claimed in the other 371 cases not being stated.
Number of letters written during the year 2,629.

STATE AND HORSE CLAIMS DIVISION.

State claims.	Original account.		Suspended account.		Montana Nez Percé Indian war account.	
	No.	Amount.	No.	Amount.	No.	Amount.
On hand June 30, 1882	10	$4,345,020 12	27	$4,852,852 42		
Received during the fiscal year	12	1,109,910 83	4	121,513 78	442	$6,879 00
Total	22	5,454,930 94	31	4,974,366 20	442	6,879 00
Reported during the fiscal year	7	340,714 75	3	39,224 68	402	6,631 00
On hand June 30, 1883	15	5,114,216 19	28	4,935,141 52	40	248 00

Horse claims.	Original account.			
	No.	Amount.	No.	Amount.
On hand June 30, 1882	4,804	$868,513 08		
Recorded during the fiscal year	1,027	148,206 70		
Reconsidered during the fiscal year	153	22,365 88		
Total	5,984	1,039,085 66	5,984	1,039,085 66
Allowed during the fiscal year	478	57,436 90		
Disallowed on amount claimed	.....	7,761 61		
Rejected during the fiscal year	55	7,368·55		
Total	533	72,567 06		
Deduct disposed of	.....	.....	533	72,567 06
On hand June 30, 1883	.....	.....	5,451	966,518 60

Number of briefs, 1,263; number of claims examined, 2,726; number of letters received, 5,328; number of letters written, 8,987; number of clerks employed, 6.

PENSION DIVISION.

The duties of this division embrace the settlement of all accounts which pertain to the payment of army pensions, including claims for reimbursement on account of expenses of last sickness and burial, payable from accrued pension in cases of deceased pensioners under the provisions of section 4718 Revised Statutes. By the decision of the Attorney-General, dated August 3, 1882, the adjudication of these claims, heretofore paid by the Pension Agents under authority of the Commissioner of Pensions, was made a part of the duties of the accounting officers, and has greatly increased the work of this division. Since this decision was rendered there have been received and settled, up to the close of the fiscal year, 1,378 reimbursement claims, involving $89,884.00.

The following table shows the number of pension agents' accounts, and amount involved, received, and audited during the fiscal year:

	Army pensions.		Arrears of pensions.		Total.	
	No.	Amount.	No.	Amount.	No.	Amount.
Accounts on hand June 30, 1882	205	$50,399,658 72	87	$72,832 76	292	$50,472,491 48
Accounts received during the year	200	54,953,783 81	205	83,746 16	405	55,037,529 97
Total	405	105,353,442 53	292	156,578 92	697	105,510,021 45
Accounts reported to Second Comptroller	159	41,441,705 83	223	129,114 83	382	41,570,820 66
Accounts remaining unsettled June 30, 1883	246	63,911,736 70	69	27,464 09	315	63,939,200 79
Total	405	105,353,442 53	292	156,578 92	697	105,510,021 45

Notifications of issue of original pension certificates recorded	12,959
Notifications of issue of increase pension certificates recorded	4,292
Notifications of issue of restoration pension certificates recorded	358
Notifications of issue of reissue pension certificates recorded	995
Notifications of issue of arrears pension certificates recorded	82
Transfers noted	3,682
Changes noted	1,168
Corrections made	4,102
Names and records copied (153,730 day work, and 177,117 night work)	330,847
Pension vouchers examined	971,872
Payments entered	892,631
Pages of abstract added	34,106
Pages of miscellaneous copied	2,849
Payments corrected	365
Surgeons' certificates copied	126
Vouchers withdrawn from the files	4,859
Letters received and registered	8,391
Letters written	10,308
Letters copied	5,260
Letters indexed	4,602
Pension checks verified before payment, 49, amounting to	$5,424 60
Settlements for "lost checks" made, 7, amounting to	3,416 54
Settlements for "forged checks" made, 3, amounting to	934 40
Settlement for transportation on account of artificial limbs, 1, amounting to	3 60
Settlement for "Relief of Edward F. Brownell," amounting to	90 00
Settlement for repayment to Chas. E. Brown, late pension agent	14 00

The following tabular statement exhibits the number of accounts, and amount involved, on hand and unsettled July 1, 1869, together with those received and audited each fiscal year since:

	Received.		Audited.	
	Number.	Amount.	Number.	Amount.
On hand July 1, 1869	637	$34,811,593 83		
Received and audited fiscal year 1870	714	27,743,819 29	631	$25,596,876 39
Received and audited fiscal year 1871	930	28,513,262 44	789	32,813,334 28
Received and audited fiscal year 1872	684	28,661,507 26	900	40,000,205 68
Received and audited fiscal year 1873	711	28,756,702 92	795	33,926,556 19
Received and audited fiscal year 1874	864	29,708,332 26	786	26,431,956 71
Received and audited fiscal year 1875	798	29,572,855 54	619	19,888,428 52
Received and audited fiscal year 1876	741	28,348,161 99	1,150	48,433,036 92
Received and audited fiscal year 1877	834	27,899,359 30	952	34,067,985 43
Received and audited fiscal year 1878	538	33,194,149 18	715	24,133,591 52
Received and audited fiscal year 1879	256	26,123,111 64	281	25,765,870 58
Received and audited fiscal year 1880	547	61,010,132 95	277	31,169,748 01
Received and audited fiscal year 1881	449	50,666,841 54	553	54,973,650 39
Received and audited fiscal year 1882	455	50,191,885 62	416	37,528,064 66
Received and audited fiscal year 1883	1,796	55,131,872 60	1,773	41,665,163 29
Total	10,954	540,333,678 36	10,639	476,394,477 57
Deduct amount audited	10,639	476,394,477 57		
Balance on hand June 30, 1883	315	63,939,200 79		

The amount appropriated for "pay and allowances"—salaries, fees on vouchers, rent, fuel, lights, stationery, and postage, was $265,000. The expenses of the agencies for these items amount to $275,413.88, or $10,413.88 in excess of the appropriation. As will be seen from the foregoing tables, there was due from this appropriation, at the close of the fiscal year, to several of the agents, sums aggregating $22,281.80, while there remained in the hands of other agents $6,865.20, leaving net amount due agents $15,416.60. To pay this there remained in the Treasury, undrawn June 30, 1883, $5,002.72, a deficiency as stated above of $10,413.88. As the expenses enumerated are fixed by law, and were legitimately and unavoidably incurred, I would suggest that authority be given the accounting officers, in settlement of the accounts of the several agents, to transfer so much of the $13,106,163.84, unexpended balance "Army pensions" which remained in hands of agents June 30, 1883, to credit of appropriation for "pay and allowances, 1883," as may be necessary to adjust this small deficiency and balance the agents' accounts.

COLLECTION DIVISION.

	Entries on registers.	Number of special cases.	Accounts referred to.	Bounty-land and pension cases examined.	Letters written.	Names of soldiers of the war of 1812 abstracted.	Days comparing.	Cases prepared for suit.	Transcripts prepared for authentication.
July, 1882	823	329	5,196	107	351	14,397	52	1	11
August, 1882	.....	191	4,511	50	205	12,788	21	.....	13
September, 1882	1,023	219	2,939	175	222	13,047	52	7	11
October, 1882	569	272	4,294	125	261	6,508	52	.....	.....
November, 1882	432	151	6,142	112	156	11,214	32	4	.....
December, 1882	699	261	4,695	113	264	14,098	40	1	9
January, 1883	682	275	5,720	104	304	14,416	52	3	11
February, 1883	769	292	6,739	111	289	9,555	47	5	7
March, 1883	2,633	277	6,248	110	290	14,238	54	4	8
April, 1883	593	287	6,817	124	291	4,611	50	3	8
May, 1883	809	333	7,540	128	358	5,745	26	2	8
June, 1883	.....	297	7,248	106	334	7,878	50	2	12
Total	9,032	3,184	68,089	1,365	3,325	128,495	528	32	98

RECORDS AND FILES.

There have been added to the files during the year new settlements as follows, viz, 7,857 money settlements and 5,737 property returns; in all, 13,594 new settlements. The records are well arranged and properly labeled, but, as a considerable portion of them are in daily use, the wear and tear is a somewhat serious matter. This is especially the case with the abstracts of pension accounts. The experiment of using wooden boxes for the records has lately been tried, and the result is so far satisfactory. The papers are much less exposed to dust, and the deterioration is not nearly so great as with the old system of twine and boards. There are four clerks employed upon the files.

CERTIFICATION OF TRANSCRIPTS.

Under the provisions of section 886 of the Revised Statutes, in cases where suit is instituted to collect money due from pension agents, the

transcripts can be certified only by the Register of the Treasury, *who has nothing whatever to do either with the settlement of said account or the custody of the same after settlement, and who can have no knowledge respecting the correctness of the transcript except that gained from the Third Auditor. The Third Auditor is also without authority to certify transcripts for suit against failing contractors and other persons charged upon the books of his office.* To remedy this defect in the law, I respectfully suggest that section 886 of the Revised Statutes ought to be so amended as to provide that upon the trial of a suit against any person on a contract with the United States, express or implied, or against any person accountable for public money, or the sureties of such person, a transcript from the books and proceedings of the Auditor charged with the examination and settlement of the account with such person or persons, certified by the Auditor, and authenticated under the seal of the Treasury Department, shall be admitted on the trial of such suit as evidence of the balance due to the United States, and be entitled to the same degree of credit which would be due to the original papers or records if produced and authenticated in court.

PAYMENTS BY NON-BONDED OFFICERS.

Many of the suits in which this office has been called upon to furnish transcripts have been instituted against *non-bonded* officers, who disbursed public moneys during the late rebellion. In this connection I desire to call attention to the practice of employing non-bonded officers to disburse Government funds, a practice which has resulted in great loss to the Government during each of the several wars in which the United States has been engaged, and more or less loss in time of peace. At the present time one hundred and twenty non-bonded officers are disbursing in the Quartermaster's Department alone, having in their hands two hundred and ten thousand dollars, too large a sum to be held and paid out by any class of men upon the security of honor alone. In the Engineer Department the entire amount appropriated by the "river and harbor" and "fortification" bills is disbursed by officers not under bond. The sums so paid out aggregate millions of dollars every year. This is not in accordance with good sound business policy. It is said that there is not a sufficient number of bonded officers in the Army to make necessary disbursements, and that non-bonded officers must be employed to make payments. In reply to this it may be said that bonds may be required by law of all commissioned officers, or, in default of this, non-bonded officers should, in my opinion, be authorized to purchase only, leaving payment to be made by the bonded officers within the district or department of the purchase. By this course the Government would not only be secured against disbursement by irresponsible officers, but payment of every claim could be readily traced, and better protection afforded against fraudulent claims and double payments. I believe firmly in the honor and fidelity of the great body of our Army officers, but I also believe that, in the interest of the Government, inherent honesty should be supplemented by a good and sufficient bond.

PAYMENTS TO AGENTS OR ATTORNEYS.

The accounting officers hold that, under section 3477 of the Revised Statutes, all payments made by disbursing officers in liquidation of claims or demands against the United States should be made to *principals only*. This requirement has resulted in great embarrassment to

disbursing officers in their transactions, as contractors, corporations, and nearly all persons presenting demands do so through agents or attorneys. Complaints of hardships resulting from the enforcement of the letter of the law are frequent, and it would seem wise and safe to so modify section 3477 of the Revised Statutes as to clearly permit all payments made by bonded disbursing officers to be made to authorized attorneys or agents.

INCREASE OF PENSION-ROLL.

During the year the business of the office has been largely increased from different sources. The working force of the Pension Office having been nearly doubled, its business has been dispatched with great rapidity; and to the same extent that the pension-roll has been swelled the work of this office has been increased. A constant increase of work in this office from this source may be confidently expected for several years to come. During the past year there have been added to the roll the names of about 38,000 pensioners, which means a net increase in the work of this office represented by the examination of 102,000 vouchers, and the entry of 102,000 payments annually, except as death may reduce the list.

REIMBURSEMENT CLAIMS.

Prior to the decision of the Attorney-General, hereinbefore referred to, nearly all the correspondence and other work incident to the examination of claims for reimbursement under section 4718 of the Revised Statutes were performed by the pension agents. By that decision the entire labor of investigating these claims was thrown upon this office. As, with the lapse of time, the death rate among pensioners rises, the number of these claims must continue to increase.

LOST-HORSE CLAIMS.

Under the act of January 9, 1883, extending the time within which claims for horses lost in the military service might be filed, over 4,500 claims have been received up to this date. Of the whole number filed it is found upon examination that about ten per centum are duplicates of claims filed years ago, and either allowed and paid or rejected, a fact which clearly demonstrates the need of extreme care in dealing with these stale claims. The whole number does not appear in the tabulated statement, owing to the fact that the force available for this work was not sufficent to enter them on our docket during the fiscal year.

CLAIMS FROM THE COMMISSARY-GENERAL.

There being a question whether the fourth section of the deficiency act of June 14, 1878, might not operate to bar the adjudication of certain claims if they should not be presented to the *accounting officers* before June 15, 1883, the Commissary-General, early in June last, sent to this office in one mass over 7,000 claims, that they might be registered upon the books of this office and be then returned for completion of the work of administrative examination in his department. This circumstance involved considerable addition to the clerical work and an abnormal addition to the number of claims received during the fiscal year.

STATUTE OF LIMITATIONS.

I deem it my duty to again renew my recommendation in regard to a

statute of limitation. The experience of this office during the present year in the examination of claims for horses lost in the military service, hereinbefore stated, feebly illustrates a danger to be avoided by the enactment of, and strict adherence to, a law fixing *some* period within which claimants must present their demands or be forever barred.

EXTENDED HOURS OF LABOR.

In order to prevent great delay in the transaction of current business, in April I was compelled to ask authority to extend the hours of labor in this office to include the hours from seven to ten o'clock in the evening, one-third of the force to be employed each evening. The order, having been issued May 1, was cheerfully obeyed by the entire force for the remainder of the fiscal year. For the willingness and promptness with which the clerks of this office took up and performed these additional duties they are entitled to great credit and ought to have good reason to hope for additional compensation at the hands of Congress.

Respectfully submitted.

E. W. KEIGHTLEY,
Auditor.

Hon. CHAS. J. FOLGER,
Secretary of the Treasury.

REPORT OF THE FOURTH AUDITOR OF THE TREASURY.

TREASURY DEPARTMENT,
FOURTH AUDITOR'S OFFICE,
Washington, November 1, 1883.

SIR: On the 19th of June, 1878, an act was approved authorizing the Secretary of the Navy to make advances to disbursing officers under a general account, the only limitation being the total appropriation for the Navy. The amounts so advanced are to be used exclusively to pay current obligations upon proper vouchers, and the "Pay of the Navy" is to be used only for its legitimate purpose as provided by law. The sum of these vouchers is to be charged to their proper and respective appropriations, the charge being limited to the amount appropriated to each. The Fourth Auditor, under this act, is required to declare the sums due from the several special appropriations upon complete vouchers, and to adjust the said liabilities with the "general account of advances." While apparently under the operations of this law "Pay of the Navy" is left intact except for its own legitimate expenditures, it is really in the end made to bear the burden of all deficiencies in the other appropriations which are not made good by Congress. The present condition of "Pay," as here shown, will help to illustrate this:

"PAY OF THE NAVY" IN ACCOUNT WITH THE UNITED STATES.

To balance in hands of disbursing officers July 1, 1882		$131,547 25
balance in Treasury by ledger July 1, 1882		1,629,067 20
amount appropriated by Congress		7,236,225 06
repayments		18,584 43
charges by settlements		82,144 12
		9,097,568 56
By expended	$6,832,115 75	
credits by settlements	79,131 86	
		6,911,247 61
Balance in hand July 1, 1883		2,186,320 95

Balance here explained:		
In hands disbursing officers June 30, 1883	$135,248 36	
In Treasury by ledger June 30, 1883	2,051,072 59	
		$2,186,320 95
Of the balance in hand		2,186,320 95
There is due to officers and men unpaid	741,701 33	
hospital fund	16,854 48	
clothing fund	43,229 38	
small-stores fund	15,174 67	
expenditures abroad	477,768 16	
		1,294,728 02
Balance		891,592 93

While "Pay of the Navy" had this balance at the close of the fiscal year after deducting its known liabilities, it must be borne in mind that a large portion of it is offset by deficiencies in other appropriations not yet made good by Congress. In other words, if the operations of the Department were to be closed with the accounts of the fiscal year 1883, the balances remaining to the credit of other appropriations would be returned to the Treasury, and "Pay of the Navy," which is continuous, would be left to bear the sum of deficiencies, which would go far towards exhausting the above balance. Careful management may reduce these deficiencies to the minimum, but the nature of the service is such that more or less are liable to occur every year. In authorizing the drawing of funds under a general account, and stipulating that "Pay of the Navy" should be drawn on only for its own proper expenditures, it was doubtless the intention of Congress that unavoidable deficiencies should be provided for by further appropriations. That intention ought to be fulfilled.

* * * * * * *

ACCOUNT WITH SELIGMAN BROTHERS.

A commission of 1 per cent. is paid to Seligman Brothers, London, for disbursements made by them. Their commissions for the year amounted to $15,943.11. They pay 4 per cent. interest on daily balances remaining on deposit with them and receive 5 per cent. interest on advances they make. The interest paid by them during the year was $2,884.20, and that received $3,037.49, making a net loss to the Department of $153.29. Money is transferred to London from New York by means of sixty-day bills. Exchange was favorable during the greater part of the year, and the net gain from this source was $10,050.53.

In this connection I renew the suggestion which I have before made, that the work of the London fiscal agents could be equally well done by one of the Navy Department's own disbursing officers, with little if any addition to present expense, and resulting in the saving of the commission now paid to those agents—a commission which, if continued, ought to be reduced at least one-half.

The following tables exhibit a summary of work performed in the different divisions of the office:

BOOKKEEPER'S DIVISION.

SUMMARY of REQUISITIONS, ACCOUNTS, LETTERS, &c., for the year ending June 30, 1883.

Date.	Number of pay requisitions.	Amount of pay requisitions.	Number of repay requisitions.	Amount of repay requisitions.	Letters received.	Letters written.	Accounts journalized, entered, and balanced.	Ledger extracts for settlement.	Answers to inquiries for accounts on ledgers.	Accounts received.	Accounts settled.	Monthly returns of receipts and expenditures.
1882.												
July	180	$1,740,815 52	26	$48,479 33	224	293	74	185	129	..	..	84
August	226	1,398,129 03	21	12,408 91	171	362	158	461	111	..	..	83
September	199	1,360,211 45	24	574,459 51	168	316	52	245	155	1	1	78
October	187	2,414,483 95	28	244,146 85	179	316	115	31	224	..	..	80
November	189	2,141,039 01	28	797,683 94	157	333	180	37	201	..	..	83
December	185	2,786,865 69	17	1,284,661 79	165	295	82	29	164	..	..	89
1883.												
January	198	1,061,342 89	29	91,771 76	162	301	22	28	85	..	..	83
February	187	2,340,035 99	50	1,037,549 78	163	208	28	39	94	..	..	65
March	215	2,007,320 75	17	320,385 22	170	338	48	63	173	..	..	101
April	202	1,080,979 01	19	63,999 55	157	275	133	37	201	..	..	61
May	200	2,200,940 93	52	998,391 40	174	290	37	36	134	4	4	88
June	190	1,915,858 32	38	847,413 14	150	269	129	46	125	3	3	71
Total	2,358	22,448,022 54	349	6,331,301 18	2,040	3,656	1,058	1,237	1,796	8	8	966

PAYMASTERS' AND MARINE ACCOUNTS DIVISION.

STATEMENT of WORK PERFORMED for the fiscal year ending June 30, 1883.

Date.	Accounts received.	Accounts settled.	Letters received.	Letters written.	Cash vouchers.	Cash disbursements.
1882.						
July	39	37	165	102	516	$601,590 73
August	53	44	147	118	1,434	1,426,360 58
September	12	21	84	104	770	1,119,349 77
October	25	37	147	116	1,018	670,596 87
November	50	38	150	147	484	794,293 84
December	25	30	145	153	619	1,041,548 51
1883.						
January	18	35	148	121	1,342	1,082,522 86
February	47	36	159	143	676	1,494,221 36
March	26	39	153	167	1,137	679,421 36
April	20	32	153	160	669	1,273,502 85
May	48	35	152	154	987	854,946 60
June	26	35	126	153	1,007	1,451,909 82
Total	389	419	1,719	1,638	10,659	12,330,264 09

Accounts on hand July 1, 1882 66
Accounts on hand June 30, 1883 36

PURCHASING PAYMASTERS' AND ALLOTMENT ACCOUNTS DIVISION

STATEMENT of the WORK PERFORMED for the fiscal year ending June 30, 1883.

Date.	Accounts received.	Accounts settled.	Letters received.	Letters written.	Amount involved.
1882.					
July	10	23	200	222	$722,317 14
August	129	40	206	217	377,698 88
September	5	33	164	164	343,699 39
October	9	57	190	182	228,741 56
November	21	43	236	213	510,290 72
December	32	70	253	274	215,774 60
1883.					
January	72	73	259	262	568,716 09
February	60	41	214	193	473,199 14
March	41	10	238	161	52,941 82
April	23	12	221	208	630,967 12
May	14	24	210	209	102,419 30
June	20	20	267	233	931,056 61
Total	436	455	2,748	2,538	5,494,921 96

Allotment accounts.

Date.	Allotments registered.	Allotments discontinued.	Date.	Allotments registered.	Allotments discontinued.
1882.			1883.		
July	63	96	January	105	114
August	178	107	February	129	107
September	95	70	March	55	79
October	67	69	April	84	91
November	104	83	May	27	78
December	133	133	June	98	102
			Total	1,108	1,129

Amounts paid for allotments at Navy Pay Offices during the year 1882.

New York	$152,708 00
Washington, D. C	99,559 50
Boston	85,971 50
Philadelphia	79,122 00
Baltimore	41,299 00
San Francisco	35,259 00
Norfolk	31,134 00
Total	525,053 00

Accounts remaining on hand June 30, 1882	193
Accounts remaining on hand June 30, 1883	174
Number of vouchers examined	33,635

NAVY PENSION ACCOUNTS DIVISION.

STATEMENT of the WORK PERFORMED for the fiscal year ending June 30, 1883.

Date.	Accounts received.	Accounts settled.	Letters received.	Letters written.	Amount involved
1882.					
July	93	85	66	51	
August	23	23	83	46	$106,446 32
September	60	65	54	56	85,633 74
October	18	8	50	87	199 50
November	27	32	57	50	70,002 83
December	24	22	88	54	114,854 33
1883.					
January	10	14	130	51	6,692 58
February	22	25	106	76	32,221 61
March	28	25	111	129	39,861 41
April	10	16	140	159	63,236 76
May	13	8	133	134	3,886 34
June	13	17	115	129	96,385 81
Total	341	340	1,133	1,022	619,421 23

Number of accounts on hand June 30, 1882	25
Number of accounts on hand June 30, 1883	26
Vouchers examined	9,990

The sum of $1,531.23, included in the forgoing expenditure for the month of August, 1882, was the entire amount paid for Navy arrears of pension during the fiscal year ending June 30, 1883, under acts January 25 and March 4, 1879.

Of the above settled accounts, forty, amounting to $1,738.07, were allowed under section 4718 Revised Statutes, reimbursing those who paid the expenses of deceased pensioners during their last illness and burial.

NUMBER of NAVAL PENSIONERS and the AMOUNT DISBURSED during the fiscal year ending June 30, 1883.

Pension agencies.	Number of Navy invalid pensioners.	Number of Navy widow pensioners.	Number of dependent relations.	Number of minors.	Total.	Disbursement for the year ending June 30, 1883.
BOSTON, MASS. (Concord, N. H., Augusta, Me.)	715	485	206	24	1,430	$205,131 71
CHICAGO, ILL. (Detroit, Mich., Columbus, Ohio, Milwaukee, Wis., Louisville, Ky., Topeka, Kans.)	243	123	15	8	389	92,061 15
NEW YORK CITY, N. Y.	539	322	85	14	960	130,318 36
PHILADELPHIA, PA. (Pittsburgh, Pa.)	475	415	75	12	977	115,267 60
SAN FRANCISCO, CAL.	71	33	.....	4	108	12,410 07
WASHINGTON, D. C. (Knoxville, Tenn.)	515	526	95	22	1,158	177,249 17
Total	2,558	1,904	476	84	5,022	732,437 46

By Executive order, dated December 4, 1882, the consolidation of the above named agencies with the agencies located in Boston, Chicago, New York City, Philadelphia, San Francisco, and Washington was consummated, and all the Navy pensioners at present are paid at the above agencies.

In addition to the foregoing the names of pensioners have been transcribed from the abstracts of payments to Navy pensioners at the New

York agency, from 1876 to 1883, into books prepared for the purpose, in order to preserve the records for reference. Also much time and labor are required in furnishing the Pension Office the necessary information or status of pensioners applying for increase pension.

BOUNTY, ARREARS OF PAY, AND GENERAL CLAIMS DIVISION.

STATEMENT of the WORK PERFORMED for the fiscal year ending June 30, 1883.

Date.	Claims.			Amount involved.	Letters.		Number of reports on application for—		
	Received.	Settled.	Rejected.		Received.	Written.	Pensions.	Bounty land.	Admission to naval asylum.
1882.									
July	211	106	12	$20,271 09	675	612	175	.....	.....
August	150	121	8	24,487 91	605	798	152	.....	1
September	124	128	2	19,341 99	550	681	145	.....	.....
October	138	177	28	29,252 36	579	636	132	.....	.....
November	120	131	20	23,003 65	568	550	121	.....	.....
December	85	152	14	26,933 47	587	545	109	.....	.....
1883.									
January	168	74	50	18,435 73	607	570	187	.....	.....
February	176	74	80	18,586 33	603	577	162	.....	1
March	241	109	52	10,790 71	903	782	227	.....	.....
April	212	129	54	11,716 02	740	642	221	.....	2
May	228	109	51	11,074 42	739	674	223	.....	3
June	387	92	41	9,973 11	907	581	101	.....	.....
Total	2,240	1,402	412	223,866 79	8,063	7,648	1,955	.....	7

Claims remaining on hand June 30, 1882 616
Claims remaining on hand June 30, 1883 1,042

Of the total amount involved in the claims settled, the sum of $12,217.59 was allowed to officers of the Navy and Marine Corps, under the decision of the United States Supreme Court in the case of Commodore Temple, as the difference between actual expenses and mileage for travel out of the United States; $22,632.10 to officers of the Marine Corps, under the decision of the Supreme Court in the case of Captain Tyler as "longevity pay"; $18,691.84 to officers of the Navy, under the acts of August 5, 1882, as longevity pay; and $15,300 to machinists honorably discharged from the Navy, as the gratuity authorized by the act of June 16, 1880. Of the $18,691.84, paid under act of August 5, 1882, as longevity pay, the sum of $6,384.15 was appropriated by Congress at the last session. The act of March 3, 1883, included the provisions on this subject in the act of August 5, 1882, and added some additional words, which, if the provision were held to be retroactive, would very much enlarge its scope and require several hundred thousand dollars to satisfy claims already filed. Before any settlements were made under the act of March 3, 1883, the matter was presented by the Secretary of the Treasury to the Attorney-General with the inquiry whether under either of said acts the party was entitled to additional pay for services rendered prior to their enactment. The Attorney-General, in an elaborate opinion given on the 22d of June, 1883, decided that neither of these acts is retroactive. Since the date of that opinion no money has been paid contrary thereto.

A STATUTE OF LIMITATION.

The filing of a large number of claims for mileage arising in trave, performed abroad by officers of the Navy, from 1835 to 1874, presents,

in my opinion, strong evidence of the propriety of some limitation being placed by law upon the prosecution of such stale demands.

The cases referred to arise under a law of 1835; it was construed by the Attorney-General, the Secretary of the Navy, and the accounting officers, and acquiesced in by the officers interested, until the law was repealed by new legislation in 1874, although the Court of Claims—established in 1855—was open to them had they desired to contest the construction placed upon the law by the executive branch of the Government.

Now, nearly ten years since the repeal of the law, upon a decision of the Supreme Court upon the construction of a law of 1876, somewhat similar to that of 1835, a mass of claims arising between 1835 and 1874 are presented and urged. A case under the act of 1835 is now before the Supreme Court, and should judgment be given against the Government a large sum will be required to meet claims revived after years of acquiescence, some of them nearly fifty years old. This statement of facts shows very clearly the necessity of some limitation, or every act since the foundation of the Government may be opened to a new construction by decisions of the Supreme Court, rendered upon that which the claimants, or their attorneys, conceive to be similar conditions. The policy of law would seem in favor of some statute of repose, or never-ending new litigations may arise upon acts long obsolete. For these reasons I submit that some limitation upon the recognition of old claims by the accounting officers be authorized by law.

PRIZE-MONEY, RECORD, AND FILES DIVISION.

STATEMENT of the WORK PERFORMED for the fiscal year ending June 30, 1883.

Date.	Letters—		Claims—			Amount of prize-money paid.	Records.			
	Received.	Written.	Received.	Settled.	Rejected.		Letters keyed in.	Letters keyed out.	Letters recorded.	Letters indexed.
1882.										
July	115	139	14	6	6	$142 47	1,495	1,419	1,463	3,535
August	144	180	23	8	12	616 39	1,356	1,721	1,236	1,650
September	119	141	15	7	6	359 22	1,139	1,462	990	990
October	111	132	18	3	15	19 96	1,256	1,469	2,040	2,929
November	79	100	21	10	11	288 19	1,247	1,393	1,850	3,572
December	101	102	7	2	5	58 96	1,369	1,423	1,904	2,884
1883.										
January	124	156	11	6	5	96 07	1,430	1,460	2,153	4,384
February	134	139	10	4	4	330 34	1,379	1,396	1,162	2,032
March	215	232	44	43	8	34,115 76	1,790	1,809	1,786	2,563
April	159	254	42	31	11	19,939 80	1,570	1,698	2,419	2,814
May	140	144	14	12	2	13,567 77	1,557	1,605	2,180	2,513
June	156	172	25	17	8	29,015 21	1,721	1,537	2,109	3,166
Total	1,606	1,890	244	149	93	99,150 14	17,609	18,392	21,242	33,032

This division is charged also with the preparation of all reports and tabular statements called for by Congress and the Secretary of the Treasury; the preservation and care of the files; keeping a record of appointments, resignations, removals, and absences; the care and issuing of stationery used in the office, and the payment of salaries to employés.

JAPANESE INDEMNITY AND NEW ORLEANS PRIZE-MONEY.

The act of February 22, 1883, known as the "Japanese indemnity act," making an award in the nature of prize-money to the officers and crews of the U. S. ships Wyoming and Takiang, for services in 1863 and 1864, has given rise to a class of claims for settlement in this division requiring more than ordinary care. Of the $140,000 awarded $95,519.07 has been paid to 75 claimants of the 172 who are entitled to share.

The time that has elapsed since the service was rendered adds much to the difficulty of settlement. The seamen are many of them dead, and their families or relatives in ignorance that anything is due them; and, in cases where claims have been made, the required evidence of identity, marriage, birth, or death, is difficult of access, or entirely out of the power of the claimants to produce, since the majority of the applications are from persons of slight education and careless habits. These causes make it frequently difficult to decide in conflicting cases, and largely increases the opportunities for fraudulent representations and claims, every case demanding the closest scrutiny.

The above remarks as to the difficulty of settlement due to lapse of time apply forcibly to the case of the New Orleans award. The action was fought in April, 1862, the award was made in 1873; two installments were distributed in 1874 and 1875, but a third installment of $143,644.47 remains due to the captors; and in this case absolute injustice is added to the inconvenience and expense placed upon the claimants by delay. The award was made in 1873 by the Supreme Court of the District of Columbia, and affirmed by the Supreme Court of the United States May 3, 1875; thus it became a *debt* due by the United States. If Congress does not soon make the necessary appropriation, very few of the men who forced the passage of Forts Jackson and Philip will be alive to enjoy their due; many widows will suffer and *are* suffering for want of that which is theirs *by law*.

In conclusion I have to report that the work of the Bureau for the year has been well and promptly done. I have been greatly aided by the ability and experience of the Deputy Auditor, Mr. B. P. Davis, and the chiefs of divisions, and the faithfulness and efficiency of clerks and employés generally.

Respectfully submitted.

CHAS. BEARDSLEY,
Auditor.

Hon. CHARLES J. FOLGER.
Secretary of the Treasury.

REPORT OF THE FIFTH AUDITOR OF THE TREASURY.

TREASURY DEPARTMENT,
FIFTH AUDITOR'S OFFICE,
Washington, October 28, 1883.

SIR: I have the honor to submit herewith the annual report of this office for the fiscal year ending June 30, 1883, accompanied by an appendix of tabular statements, as follows:

Table A, giving the names of diplomatic officers, including ministers, chargés d' affaires, secretaries, and interpreters, with salaries, contingent expenses, and passport fees.

Tables B and C, showing the salaries of consuls and their compensation from agencies; salaries for instruction, transit, and while awaiting exequatur; fees collected, contingent expenses, loss by exchange, and allowance for clerks at the several consulates.

Table D, showing the fees collected at unsalaried consulates and the compensation of consuls; also, rent, clerk hire, and contingent expenses.

Table E, giving the names of consular clerks, with their salaries and location.

Table F, showing the expenses for rent of prisons and wages of prison keepers at consulates in China, Japan, Siam, and Turkey; also, salaries of marshals and interpreters.

Table G, showing the number of seamen afforded relief at the various consulates, with the amount expended and the extra and arrears of wages collected.

Table H, showing the number of seamen sent to the United States, with the amount paid at the Treasury for their passage.

Table I, showing the character and amount of the fees and charges collected at each consulate, inclusive of agencies.

Table K, showing the internal-revenue assessments and the amount of cash deposited by districts and States.

Table L, showing the salaries of collectors of internal revenue, with the amounts paid deputies, clerks, storekeepers, gaugers, and for incidental expenses.

The clerical force of the Bureau consists of three chiefs of divisions, four clerks of class 4, five of class 3, four of class 2, six of class 1, two at $1,000 each, and four at $900 each.

During the year 11,457 accounts have been adjusted, 236,081 vouchers examined, 7,168 reports copied, 6,753 letters written, 26,884 coupon books counted, and 26,815 coupon books scheduled. The amounts involved in the accounts adjusted aggregate $894,138,353.17.

DIPLOMATIC AND CONSULAR DIVISION.

In this division the expenses of the diplomatic and consular service of the United States are adjusted, including salaries and contingent expenses, relief and passage of American seamen, estates of American citizens and seamen dying abroad, awards of commissions, expenses of international exhibitions, &c.

Diplomatic service.—The accounts of ministers and other officials in this service, so far as they have been presented for settlement (Table

A), show $291,304.57 paid for salaries of ministers and chargé d'affaires, $30,703.83 for salaries of secretaries, interpreters, and clerks of legations, $60,460.96 for contingent expenses, and $1,602.83 for loss by exchange, aggregating $384,072.19. Passport fees were collected amounting to $3,516.17. In the absence of a minister the secretary of legation becomes *ex officio* chargé d'affaires and receives salary as such. This accounts for the repetition of names in the tabular statement. It will be noted also that in a few cases the amount paid for salary exceeds the amount appropriated. This occurs whenever an official remains in office while his successor is paid salary for instructions and transit.

Consular service.—Consulates-general, consulates, and commercial agencies are divided by statute into three classes, as follows: (1) Those embraced in a schedule known as Schedule B, the incumbents of which receive a fixed salary and are not allowed to engage in private business. (2) Those embraced in a schedule known as Schedule C, the incumbents of which receive a fixed salary and are allowed to engage in business. (3) All other consulates, the incumbents of which are compensated by the fees collected in their offices and are allowed to transact business. In tabulating consular accounts for fees, salaries, and other expenditures (Tables B, C, and D) this classification has been observed.

During the year accounts have been adjusted showing that official fees were received and expenses paid as follows:

Fees for official services		$914,839 74
Consular salaries	$413,606 22	
Loss by exchange	3,554 31	
Compensation from fees	210,332 57	
Rent, clerk hire, &c. (sec. 1732 R. S.)	9,475 74	
Contingent expenses	132,699 89	
Allowance for clerks	64,991 27	
Rent of prison, wages of keepers, &c., China	7,913 46	
Rent of prison, wages of keepers, &c., Japan	3,181 60	
Rent of prisons, wages of keepers, &c., Siam and Turkey	1,279 62	
Salaries of interpreters in China, Japan, and Siam	13,946 02	
Salaries of marshals for consular courts	6,350 00	
Expenses for interpreters, guards, &c., in Turkish dominions	2,957 90	
		870,290 60
Excess of receipts over expenditures		44,549 14

In the amount given for consular salaries are included the salaries of consular officers not citizens of the United States, aggregating $953.72, covered by a separate appropriation, and also the salaries of consular officers for instructions, transit, and while awaiting exequatur, amounting to $11,920.46.

Consular fees.—The receipts from consular fees have increased year by year from $624,265.99 in the fiscal year 1877 to $826,545.76 in 1880, and to $843,066.36 in 1881. The last report gave the fees for 1882 at $889,840.55, but several accounts then unadjusted have increased this to $917,331.30, as shown in Tables B, C, and D. For the fiscal year just closed the fees adjusted aggregate $914,839.74. This amount will be increased by a few returns not yet received, so that the receipts for 1883 will equal if not slightly exceed those for 1882.

Consulates from which returns are incomplete are properly marked in the tables.

For the purpose of comparison, fees collected at the various consulates and their agencies are given in Tables B, C, and D for the fiscal years 1882 and 1883. It will be noted that while the fees aggregate about

the same for the two years, most of the consulates show some increase or diminution of receipts. In some cases these differences are quite noticeable. Among the consulates-general there is a decrease of $2,400 at Berlin, $3,000 at London, $2,000 at Montreal, and $700 at Shanghai. The noticeable gains are at Havana $1,300 and Calcutta $900. Several consulates in Schedule B present similar changes. At Liverpool the receipts are $2,700 less, at Lyons $2,200, at Toronto $1,300, at Prague $1,000, at Belfast $2,000, and at Hamburg $1,500; while the receipts at Bradford have increased $1,300, at Barmen $2,100, at Palermo $3,200, and at Tunstall $3,300. Lurgan, an agency of Belfast, established in June, 1882, reports $1,625, which nearly covers the decrease of fees at Belfast, and probably explains the loss, the business going to the agency instead of to the consulate. The returns from Altona, amounting to $1,251, may also account in part for the decrease of fees at Hamburg, of which it is an agency, being established in January, 1882. Perhaps the most conspicuous gain is at Garita Gonzalez, an agency of Nuevo Laredo. It was established in January, 1882, and for the six months ending June 30 returned fees to the amount of $217.50. This year the returns aggregate $1,949, while the consulate reports $1,199.50 as against $1,527 last year.

In this connection I desire to call attention to Table I, showing the sources from which consular fees are derived. It will be observed that the total consular charges on American shipping amount to $135,499.96, as against $129,906.18 reported last year. The following totals are given:

VESSELS' FEES AND CHARGES.

Shipping and discharging crews	$15,564 55	
Receiving and delivering ships' papers	29,432 23	
Bills of health, clearances, and other fees	51,212 66	
Extra wages	39,290 52	
Total from vessels		$135,499 96

MISCELLANEOUS FEES.

Invoices	$752,760 04	
Other fees	65,870 26	
		818,630 30
Total		954,130 26

Extra wages are included in this last amount which accounts for its being larger than the total given elsewhere of official fees collected.

Relief of seamen.—During the year, 1,042 seamen were relieved at an average cost of about $25 each, and 384 sent to the United States on certificates payable at the Treasury at an additional cost of $14 each. Last year 1,380 were relieved at a cost of $22.50 each, and 704 sent home at $12.50 each. Accounts were adjusted as follows:

Extra wages collected	$39,290 52	
Arrears of wages collected	17,093 05	
		$56,383 57
Extra and arrears of wages refunded to seamen		24,317 75
		32,065 82
Board and lodging	8,003 36	
Clothing	4,600 53	
Passage certificates paid at Treasury	5,374 00	
Other expenses, including medical aid	13,599 08	
		31,576 97
Excess of wages not refunded over relief		488 85

To the amount paid for relief should be added $1,500 or thereabouts, to cover accounts not yet received and adjusted. But in arriving at the exact amount of relief, the expense covered by arrears of wages should be deducted from the total amount afforded, for seamen cannot be regarded *destitute* who have arrears of wages. During the year such expense amounted to about $3,000, showing that the relief afforded seamen who were actually destitute was less than $30,000. Of this amount one of the largest items was for medical aid, an expense which might be materially reduced if seamen were subjected to a physical examination preliminary to shipment.

Of those to whom relief was granted, 491, or nearly one-half, had suffered shipwreck. This class of seamen become the special wards of the Government, and ample provision is made for their care without regard to nationality or to their character as American seamen. It is gratifying to know that the greater part of the relief afforded this year went to that unfortunate class.

It is to the credit of the consular service also that of those relieved only 82 were "deserters," or about one-half the number aided in 1882. Of the 128 seamen relieved at Santiago, Cape Verde Islands, and Fayal, Azores, during that year, 97 were deserters. This year 9 were relieved at Victoria, Vancouver's Island, being the highest number of deserters aided at any consulate except at Fayal, the accounts of which are not yet adjusted. Six were relieved at Santiago, Cape Verde Islands, and at Port Louis, Cape Town, Marseilles, and Hull, five each. Of the 88 consulates granting relief, only 31 afforded aid to this class.

Since the passage of the laws respecting relief, the conditions have materially changed. In earlier days the men who manned American vessels represented the homes of the New England and seaboard States. "The controlling object of the statutes," says the Consular Regulations, Par. 234, "was the preservation and protection of a body of seamen, citizen of the United States, who should be available for the merchant marine, and whom consular officers should have the means of maintaining and returning to the United States on their discharge abroad." It is well understood, however, that the great body of seamen now manning American vessels belong to a different class.

Writing of this subject, United States Consular Agent Comsett, of Desterro, South Brazil, says (Consular Reports No. 26):

> And it is also true that the American sailor, of whom tradition has taught Americans to be proud, is gradually disappearing from actual existence.

Mr. H. C. Marston, United States consul at Malaga, writing of the same subject, says (Consular Reports No. 10):

> American seamen, like American ships, are a thing of the past. Even among the crews of American vessels you will find nine-tenths are composed of foreign subjects, and in many cases many of them are men who never saw America and have no feeling in common with her interests.

Mr. John S. Mosby, United States consul at Hong-Kong (No. 157), writes:

> An American sailor is certainly now a *rara avis in terris*. At least nine-tenths of the sailors I discharge are foreigners who sail indifferently under the flags of every nationality, * * * always ready to go on the first ship that offers a chance as soon as they have had a spree on shore.

Mr. Packard, the United States consul at Liverpool (No. 168), says:

> During the calendar year of 1881 there arrived at this port from the United States 159 American ships, the crews numbering, exclusive of the masters, 3,088. Of this number 1,197 were reported on the articles as citizens of the United States, and 1,891

were reported as subjects of the various foreign countries. These crews are accounted for as follows: 1,886 deserted at this port, 159 were discharged with extra wages, 21 died, 22 detained or imprisoned by the authorities, and 1,000 continued the voyage. The number of seamen deserting, it will be observed, corresponds nearly with the number of foreigners comprised in the crews of the 159 American ships arriving.

Mr. Howard, United States commercial agent at Hull, England, says (Consular Reports No. 17):

I beg to record my settled conviction that the present system of relief of American seamen only results in the expenditure of money for the relief of foreigners, the encouragement of crimps, and in many cases even to false swearing by the master to the desertion list.

In a letter addressed this office in January last, the shipping commissioner at New York states that of 6,947 seamen shipped during the year 1881, only 1,449 seamen and 1,145 officers declared themselves American born. "But of these 1,449 seamen who declared themselves American born," says the commissioner, "I believe, judging from their names, their speech, and their general appearance, that not one in five were so born." Similar statements have been addressed this office by the shipping commissioners at Philadelphia, Baltimore, and Boston.

In view of these statements which might be multiplied by reference to other consular reports, it is evident that consular officers cannot be too careful that they act advisedly in the disbursement of relief, and that most of them are careful is evidenced by the fact that the relief this year is less than one-half the amount afforded in 1879.

Adjustment of consular returns.—The work of revising consular returns of fees and charges as required by section 4213 of the Revised Statutes has been prosecuted with good results during the year. It adds materially to the labor bestowed in former years on the adjustment of consular accounts, but with the present clerical force allowed the division it can be satisfactorily performed. Reports from collectors of customs are received monthly, which are compiled and afterwards compared with the consular returns rendered quarterly. This work has been retarded somewhat by the illegible and irregular numbering of invoices by some of the consular officers, but their attention has been called to the matter by instructions from the Department of State.

Another and perhaps the most serious delay to the work of the division is the failure of many consular agents to forward their returns promptly and in order. The opinion seems to obtain that agents, being paid from fees, are required to report only once a year; but respecting returns, consular regulations make no distinction between salaried and unsalaried consular officials, par. 493 requiring that "returns of fees must be made *without fail at the close of each quarter.*" Many accounts audited and reported below, under "accounts for prior years," should have been adjusted in former years, and would have been but for the delay in reaching this office.

Other expenses of the foreign service.—During the year other accounts pertaining to the foreign service have been adjusted as follows:

Court of Commissioners of Alabama Claims	$133,407 12
French and American Claims Commission	193,533 45
Commisioner to negotiate a commercial treaty with Mexico	6,000 00
Spanish and American Claims Commission	4,458 33
International Congress of Electricians held in 1881 at Paris	2,957 75
Commission to China 1880–1881. Act approved August 5, 1882	2,000 00
International Bureau of Weights and Measures, 1883	2,231 27
Allowance to widows or heirs of diplomatic and consular officers who died abroad, 1883	1,038 27
Rescuing shipwrecked American seamen, 1883	807 23
Bringing home criminals, 1883	199 91

Cape Spartel light, 1883	$301 80
Shipping and discharging seamen, 1883	4,203 00
Rent of court-house and jail at Yedo, 1883	3,400 00
Buildings and grounds for legation in China, 1883	3,000 00
Payment of Japanese indemnity fund (act approved February 22, 1883)	785,000 87
Relief of claimants for destruction of private armed brig General Armstrong, act of April 20, 1882	13,728 84
Allowance to James Rea, late consul at Belfast, for clerk hire and other expenses, per acts approved June 30, 1882, and March 3, 1883	6,036 98
Allowance to James Rea, for relief of seamen for 1880 and prior years, per act approved June 30, 1882	600 00
Two years' salary to E. J. Mallett, late consul-general at Italy, per act approved March 3, 1883	6,000 00
Payment to creditors of Henry O. Wagner, late consular clerk at Lyons, France, act approved April 1, 1882	545 50
Allowance to Mrs. Sophronia R. Hurlbut, widow of Stephen A. Hurlbut, late envoy, &c., per joint resolution of July 28, 1882	3,453 50
Allowance to Mrs. Louisa V. De Kilpatrick, widow of General Judson Kilpatrick, late minister to Chili, per joint resolution approved July 28, 1882	5,124 17
Allowance to Mrs. Sarah J. S. Garnet, widow of Henry A. Garnet, late minister to Liberia, under joint resolution approved August 1, 1882	2,728 50
Allowance to Rebecca L. Lewis and J. J. Coffey, per private act No. 63, approved March 3, 1883	4,000 00

Disbursing clerk's accounts.—The disbursing clerk of the Department of State, R. C. Morgan, has rendered accounts which have been adjusted as follows:

Expenses under the neutrality act, 1882, $3,500; 1886, $5,883.73	$9,383 73
Rescuing American seamen, 1882, $1,626.43; 1883, $1,834.95	3,461 38
Contingent expenses, foreign missions, 1880, $756.44; 1881, $1,850.65; 1882, $8,865.84; 1883, $10,320.03	21,792 96
Bringing home criminals, 1881, $893: 1882, $2,544.83; 1883, $46.87	3,484 70
Contingent expenses, consulates, 1880 and prior years, $969.18; 1881, $613.61; 1882, $32,529.03; 1883, $46,813.94	80,925 76
International Sanitary Congress	200 00
International Exhibition at Sydney and Melbourne, 1879-'80	20 00
Fishery Exhibition of 1883 at London	39,241 55
Removal of remains of S. A. Hurlbut from Peru to Illinois	487 62
Payment to E. J. Mallett, late consul-general to Italy, act March 3, 1883	2,525 00

Accounts for prior years.—Diplomatic and consular accounts, not heretofore reported, were received during the year and have been adjusted as follows:

Salaries of ministers, 1881, $1,098.90; 1882, $13,264	$14,362 90
Salaries of secretaries of legation, 1878	825 83
Salaries of United States consuls, 1871 and prior years, $762.37; 1874, $163.04; 1881, $636.98; 1882, $6,219.33	7,781 72
Contingent expenses foreign missions, 1879, $1,003; 1880 and prior years, $226; 1882, $1,505.91	2,734 91
Contingent expenses United States consulates, 1874, $82.79; 1878, $102.64; 1879, $186.63; 1880, $316.49; 1881, $1,200.85; 1882, $1,665.03	3,554 43
Allowance for clerks at consulates, 1881, $162; 1882, $573.92	735 92
Expenses of interpreters, guards, &c., Turkish dominions, 1882	130 20
Wages of keepers, &c., China, 1882	555 80
Salaries of interpreters to China, Japan, and Siam, 1882	625 00
Salaries of marshals for consular courts, 1882	250 50
Rent of prisons, wages of keepers, Siam and Turkey, 1882	296 00
Rent of court-house and jail, Yedo, 1879, $3,400; 1880, $3,400; 1881, $3,400; 1882, $3,400	13,600 00
Shipping and discharging seamen, 1882	606 00
Rescuing American seamen, 1878, $100; 1880, $440; 1882, $335.93	875 93
Relief and protection of destitute American seamen, 1871 and prior years, $117.80; 1881, $1,420.04; 1882, $3,666.68	5,204 52
Allowance to widows or heirs of consular and diplomatic officers who die abroad, 1882	1,115 34
International Exposition at Paris, 1878	192 34
Procuring copies of Dr. Kohl's maps of the continent and islands of America	245 09

Morton, Rose & Co.'s accounts.—During the year Messrs. Morton, Rose & Co., bankers of the United States at London, received $255,296.78 on account of consular fees, $13,729.15 on account of extra wages and other money of seamen, and $3,647.52 from the estate of Clews, Habicht & Co. Their disbursements were as follows:

Salaries of ministers, 1882, $44,214.27; 1883, $146,523.92	$190,738 19
Salaries of secretaries of legation, 1881, $449.98; 1882, $6,696.70; 1883, $24,007.58	31,154 26
Contingent expenses foreign missions, 1882, $3,480.94; 1883, $29,947.07	33,428 01
Salaries of consular service, 1882, $3,336.08; 1883, $3,674.06	7,010 14
Contingent expenses United States consulates, 1882, $550; 1883, $800.03	1,350 03
Books and maps, 1882	4 42
Fishery exhibition of 1883 at London	4,374 45
Expenses of Cape Spartel light, 1883	285 00
Expenses of interpreters, guards, &c., in Turkish dominions, 1883	125 00
Oil jettisoned from ship Empire	2,627 54

Decedents' trust fund.—Amounts were paid from "estates of decedents, trust fund," having been previously covered into the Treasury, as follows:

Charles Frodin, deceased seaman	$251 86
Axel Ek, alias Charles Bailey, deceased citizen	332 35
Mary K. Colburn, deceased citizen	1,061 50
John Mulligan, deceased citizen	78 66
G. F. Shipley, deceased citizen	1,070 94
James Totten, deceased citizen	946 76
	3,742 07

INTERNAL REVENUE DIVISION.

In this division the accounts of collectors of internal revenue are adjusted, including salaries, contingent expenses, and compensation of storekeepers. The recent consolidation of collection-districts, reducing the number of collectors from 126 to 84, will not materially lessen the work of this division. There will be no decrease in deputy collectors or storekeepers, so that the number of vouchers to be examined will remain the same. Indeed, this character of work is more likely to increase than decrease, as is shown in the following table, giving the work of this division for the past six years:

Fiscal year.	Number of accounts audited.	Number of vouchers examined.	Reports recorded and copied.	Coupon books counted and scheduled.
1878	3,061	89,088	1,497	14,134
1879	3,159	92,750	1,617	20,504
1880	3,153	98,562	1,468	23,629
1881	3,085	110,851	1,383	22,361
1882	3,078	98,767	1,542	25,796
1883	3,031	113,739	1,576	26,883

It will be noted that while the number of accounts audited has remained about the same during these years, the vouchers examined and coupon books counted and scheduled have gradually increased.

Assessments and deposits.—During the year collectors of internal revenue collected and deposited $137,622,842.55, as shown by districts in Table K. This was exclusive of $7,034,804.61 derived from the sale of adhesive stamps, and $53,979.42 from other sources. The following statement shows the assessments by States, with the cash deposited for

1883. For purposes of comparison the cash deposited for 1882 has been added:

States.	Assessments and stamps charged.	Cash deposited 1883.	Cash deposited 1882.
Alabama	$126,224 41	$112,118 86	$139,706 96
Arizona	75,082 25	41,051 89	45,068 05
Arkansas	153,992 97	97,521 29	110,957 37
California	4,742,736 57	4,002,796 64	4,126,744 11
Colorado	272,700 68	216,100 47	247 264 09
Connecticut	527,922 72	509,895 13	561,592 30
Dakota	132,389 03	88,256 08	65,998 56
Delaware	306,310 99	293,636 48	350,906 37
Florida	278,750 20	251,613 92	278 855 98
Georgia	485,933 84	398,751 26	360,123 32
Idaho	58,055 10	34,588 68	31,070 89
Illinois	28,484,218 28	25,996,585 00	28,207,453 19
Indiana	6,163,679 65	5,586,693 88	6,506,508 17
Iowa	4,394,226 22	4,071,975 30	1,841,531 21
Kansas	276,757 55	239,225 39	264,091 35
Kentucky	19,267,549 01	15,385,689 22	10,523,315 96
Louisiana	1,005,672 79	739,808 34	918,899 19
Maine	80,158 21	72,893 32	85,959 83
Maryland	4 092,421 68	3,431,852 24	2,819,440 10
Massachusetts	3,042,476 47	2,753,661 97	2,937,359 07
Michigan	2,290,836 70	1,884,220 40	1,999,932 80
Minnesota	597,798 11	538,151 27	521,820 19
Mississippi	74,542 32	77,631 64	87,314 18
Missouri	9,693,994 11	7,671,792 86	7,554,454 16
Montana	112,365 75	75,542 81	68,001 21
Nebraska	1,434,812 46	1,320,517 23	1,108,194 05
Nevada	51,276 10	40,308 22	50,350 57
New Hampshire	381,681 58	351,366 60	352,394 58
New Jersey	6,341,106 14	5,424,428 79	5,450,968 24
New Mexico	82,095 11	53,172 29	56,065 91
New York	19,264,122 10	17,967,911 57	19,453,355 36
North Carolina	2,938,582 69	2,379,141 75	2,869,344 98
Ohio	18,454,640 77	15,712,020 36	18,368,784 59
Oregon	115,544 53	101,097 75	88,648 78
Pennsylvania	9,661,832 28	8,732,447 01	8,763,174 54
Rhode Island	388,447 81	395,319 43	229,256 48
South Carolina	153,711 57	118,045 06	118,867 71
Tennessee	1,412,962 58	1,175,557 65	999,049 60
Texas	308,747 13	277,370 53	267,056 38
Utah	61,095 46	53,895 10	48,523 16
Vermont	52,538 19	46,092 80	54,861 62
Virginia	7,322,196 11	5,078,021 44	6,231,913 71
Washington	66,941 42	48,760 12	41,084 42
West Virginia	620,500 00	560,397 73	499,469 06
Wisconsin	3,527,353 85	3,195,200 96	3,191,298 07
Wyoming	26,986 73	19,705 82	19,487 20
	159,403,489 02	137,622,842 55	138,926,779 72

Collectors' expenses.—Disbursement accounts were adjusted, aggregating $4,092,708.89, as follows: Salaries of collectors, $433,236.17; compensation of deputies and clerks, $1,478,328.08; rent, fuel, and lights, $55,917.25; stationery, expressage, and other incidental expenses, $20,628.63; compensation of storekeepers, $1,300,083; compensation of gaugers, $804,515.76. The statement following exhibits these expenses by States, showing at a glance the relative cost of collecting the revenue.

It will be observed that the cost in North Carolina is about as much as in New York, although nearly eighteen millions were collected in the latter State, as shown by the preceding table, while in North Carolina less than three millions were collected. In other words, $1 in New York collects $55, and in North Carolina it collects $7. The neighboring States of Indiana and Kentucky present interesting differences, the cost of collecting the revenue in Kentucky being $1 for every $22 collected, and in Indiana $1 for every $43. In Illinois it is $1 to $70; in Nebraska, $1 to $54; in Ohio, $1 to $49; in Michigan, $1 to 41; in Wisconsin, $1 to $45; in Pennsylvania, $1 to $25; in Virginia, $1 to

$34; in South Carolina, $1 to $3; in Georgia, $1 to $5; in Alabama, $1 to $4; in Mississippi, $1 to $4; in Tennessee, $1 to $8, and in Texas, $1 to $6. The average cost for all the States is $1 to $34.

States.	Expenses of collector's office.				Compensation of storekeepers.	Compensation of gaugers.	Total expense.
	Salary of collector.	Deputies and clerks.	Rent, fuel, and lights.	Stationery, expressage, and other expenses.			
Alabama	$5,000 00	$19,428 95	$399 99	$227 49	$1,887 00	$2,550 69	$29,494 12
Arizona	2,250 04	4,309 01	641 01	150 52	.....	824 35	8,174 93
Arkansas	2,625 00	14,758 20	.....	254 93	7,376 00	1,782 67	24,796 80
California	7,750 00	51,534 70	1,280 00	869 93	25,852 00	35,079 98	122,366 61
Colorado	2,875 00	11,789 12	1,100 00	142 62	.....	1,976 72	17,883 46
Connecticut	6,000 00	17,156 31	650 00	194 08	2,932 00	4,850 65	31,783 04
Dakota	2,750 00	6,900 00	475 00	157 37	.....	.....	10,282 37
Delaware	3,125 00	8,425 00	300 20	85 36	.....	1,213 82	13,149 38
Florida	3,000 00	10,351 60	589 32	96 72	.....	.....	14,037 64
Georgia	5,766 33	41,136 25	100 00	441 04	37,363 00	8,910 34	93,716 96
Idaho	2,125 00	4,487 40	380 00	341 61	1,252 00	414 14	9,000 15
Illinois	29,313 20	93,089 40	2,969 09	1,362 54	104,601 00	108,964 23	340,299 46
Indiana	21,250 00	36,859 20	1,292 20	688 12	38,213 00	27,543 11	125 845 63
Iowa	13,500 00	28,948 79	715 60	440 37	15,464 00	14,468 21	73,536 97
Kansas	3,000 00	12,585 94	552 05	112 48	2,191 00	469 56	18,911 03
Kentucky	24,000 00	82,840 80	2,197 34	2,381 54	441,974 00	147,222 73	700,616 41
Louisiana	4,000 00	26,223 65	112 50	193 20	.....	7,687 87	38,217 22
Maine	2,375 00	6,700 00	.....	56 75	.....	.....	9,131 75
Maryland	7,250 00	39,635 48	750 00	445 35	31,699 00	29,994 60	109,774 43
Massachusetts	12,125 00	39,275 00	946 20	338 09	17,812 00	19,296 36	89,792 65
Michigan	13,125 00	28,172 04	1,331 25	406 29	.....	3,238 09	46,272 67
Minnesota	6,000 00	14,998 55	200 00	240 74	.....	2,925 21	24,364 50
Mississippi	2,875 00	17,355 45	480 00	198 81	.....	166 90	21,076 16
Missouri	17,250 00	53,352 75	4,315 35	1,258 41	34,328 00	38,347 96	148,852 47
Montana	2,500 00	7,600 00	400 00	39 88	.....	105 14	10,645 02
Nebraska	4,500 00	8,000 00	.....	113 21	5,816 00	5,675 60	24,104 81
Nevada	2,500 00	4,978 80	400 00	96 05	.....	87 01	8,061 86
New Hampshire	3,343 75	5,300 00	.....	97 32	1,460 00	1,080 19	11,281 26
New Jersey	11,375 00	38,696 08	907 50	329 21	3,476 00	7,382 36	62,166 15
New Mexico	2,500 00	4,655 25	700 00	132 60	.....	270 26	8,258 11
New York	46,281 25	180,894 11	12,230 69	1,682 22	18,110 00	67,684 74	326,883 01
North Carolina	14,625 00	85,717 37	1,615 00	1,255 25	188,549 00	33,414 84	325,176 46
Ohio	33,781 60	96,400 69	7,082 17	1,320 27	80,349 00	101,136 17	320,069 90
Oregon	2,625 00	4,926 04	.....	52 85	188 00	1,074 55	8,866 44
Pennsylvania	36,125 00	130,017 12	4,386 89	1,529 63	105,621 00	73,895 35	351,574 99
Rhode Island	3,375 00	6,600 00	.....	54 34	.....	758 17	10,787 51
South Carolina	3,625 00	20,321 28	.....	237 96	11,662 00	1,959 98	37,806 22
Tennessee	9,500 00	37,504 59	515 00	482 15	74,925 00	16,005 03	138,931 77
Texas	8,125 00	31,099 72	1,278 20	276 85	4,361 00	2,637 36	47,778 13
Utah	2,500 00	3,400 00	396 00	47 71	.....	1,137 52	7,481 23
Vermont	2,250 00	3,908 20	191 53	55 65	.....	.....	6,495 38
Virginia	20,500 00	85,664 68	2,111 09	961 83	25,356 00	16,544 16	151,137 76
Washington	7,250 00	3,991 20	250 00	192 56	.....	.....	6,683 76
West Virginia	6,125 00	16,260 90	437 50	67 38	4,335 00	4,074 92	31,306 70
Wisconsin	13,375 00	31,179 06	888 58	473 13	12,931 00	11,664 22	70,510 99
Wyoming	2,125 00	2,803 40	350 00	46 22	.....	.....	5,324 62
	433,236 17	1,478,328 08	55,917 25	20,628 63	1,300,083 00	804,515 76	4,092,708 89

MISCELLANEOUS DIVISION.

In this division are adjusted all miscellaneous internal-revenue accounts, including salaries and expenses of agents, surveyors of distilleries, fees and expenses of gaugers, stamp agents' accounts, counsel fees, drawbacks, taxes refunded, redemption of stamps, accounts for the manufacture of paper and stamps and for the salaries of the office of the Commissioner of Internal Revenue; also accounts of the Census Office, Smithsonian Institution and National Museum, contingent expenses of the Post-Office Department, and sundry accounts of the Department of State and the Patent Office.

Agents' accounts.—The salaries and expenses of internal-revenue agents for the year are as follows:

Name.	Per diem.	Salary.	Expenses.			Total.
			Transportation.	Subsistence.	Other expenses.	
A. H. Brooks	$8 00	$2,504 00	$272 82	$316 79	$60 42	$3,154 03
W. H. Chapman	8 00	2,504 00	362 29	578 29	35 36	3,479 94
G. Clemen	7 00	2,191 00	255 30	492 50	91 04	3,029 84
A. M. Crane	8 00	2,496 00	559 26	713 55	46 69	3,815 50
M. H. Creager	7 00	2,142 00	559 17	619 68	49 07	3,369 92
O. G. Daniels	6 00 / 7 00	1,901 00	469 27	695 92	91 81	3,158 00
C. W. Eldridge	8 00	2,496 00	406 71	380 88	34 32	3,317 91
T. J. Grimeson	8 00	2,504 00	349 62	1,018 16	54 68	3,926 46
J. H. Hale	8 00	2,496 00	582 06	666 29	70 14	3,814 49
C. B. Harrison	8 00	2,488 00	388 90	525 12	39 05	3,441 07
W. L. Hollister	6 00	234 00	61 29	76 25	3 85	375 39
H. Kellogg	8 00	2,504 00	430 70	702 24	74 55	3,711 49
T. J. Kinney	8 00	2,496 00	418 98	857 65	55 62	3,828 25
A. A. Knight	8 00	2,504 00	617 62	1,106 39	76 84	4,304 85
J. E. Larkin	7 00	2,177 00	470 60	790 63	61 50	3,499 73
J. Lodand	6 00 / 7 00	1,729 00	569 05	525 06	52 75	2,875 86
J. B. Marvin	8 00	2,504 00	841 12	778 76	93 50	4,217 38
J. B. McCoy	7 00 / 8 00	2,244 00	576 17	697 24	56 73	3,574 14
P. H. McGowan	8 00	2,360 00	167 88	942 10	67 52	3,537 50
E. McLeer	8 00	2,488 00	333 72	398 25	87 12	3,307 09
F. S. Neustadtl	7 00 / 8 00	2,347 00	342 86	165 25	77 15	2,932 26
J. Packard	8 00	2,504 00	815 53	991 92	156 10	4,467 57
S. Plummer	8 00	2,504 00	427 53	993 95	101 11	4,026 59
T. Powers	7 00 / 8 00	2,296 00	656 12	730 49	76 98	3,759 59
J. M. Raum	8 00	2,472 00	379 69	750 45	78 65	3,680 79
F. D. Sewall	12 00	3,708 00	228 60	128 90	17 00	4,082 50
William Somerville	8 00	2,480 00	229 95	784 35	70 76	3,515 06
D. D. Spaulding	8 00	2,496 00	835 47	663 95	75 26	4,070 68
L. A. Thrasher	8 00	2,504 00	276 09	838 87	56 63	3,675 59
T. C. Tracie	8 00	2,080 00	453 35	244 65	165 75	2,943 75
J. L. Trumbull	8 00	2,488 00	362 60	426 85	38 10	3,315 55
J. Wagner	8 00	2,504 00	500 35	725 01	112 70	3,842 06
E. D. Webster	8 00	2,080 00	380 25	773 55	102 13	3,335 93
J. C. Wheeler	8 00	2,496 00	918 67	839 03	118 54	4,372 24
A. T. Wimberly	6 00	1,020 00	344 30	178 50	28 50	1,571 30
G. W. Wilson	8 00	2,480 00	409 95	754 79	91 37	3,736 11
J. T. Wilson	6 00	576 00	21 70	205 60	9 55	812 85
Total	.....	83,997 00	16,275 56	23,027 86	2,578 84	125,879 26
Stationery furnished revenue agents	.....	.....	.....	.....	.....	292 07
Transportation over Pacific railroads under orders from Treasury Department	.....	.....	.....	.....	.....	1,223 55
Total	.....	.....	.....	.....	.....	127,394 88

Stamp accounts.—The accounts of the Commissioner of Internal Revenue for distilled spirit and other stamps are as follows:

DISTILLED SPIRIT STAMPS.

Dr.		Cr.	
To stamps on hand June 30, 1882	$30,966,880 00	By stamps sent to collectors	$78,836,025 00
To stamps received from printers	78,010,900 00	By stamps destroyed by committee	247 50
To stamps received from collectors	326,295 00	By stamps on hand June 30, 1883	30,368,050 00
To stamps returned for redemption	247 50		
	109,204,322 50		109,204,322 50

SPECIAL TAX STAMPS.

To stamps on hand June 30, 1882	1,213,800 00	By stamps sent to collectors	9,102,958 00
To stamps received from printers	11,078,500 00	Amount of reduction in value of stamps under act March 3, 1883	1,510,660 00
To stamps returned by collectors	352,300 00	By stamps destroyed by committee	771,000 00
		By stamps on hand June 30, 1883	1,259,982 00
	12,644,600 00		12,644,600 00

BEER STAMPS.

Dr.			
To stamps on hand June 30, 1882....	$4, 228, 208 34	By stamps sent to collectors.....	$17, 901, 1
To stamps received from printers...	17, 810, 833 33	By stamps destroyed by committee.	9, 8
To stamps returned by collectors ...	9, 268 91	By stamps on hand June 30, 1883....	4, 127, 8
To stamps received for redemption..	594 99		
	22, 048, 905 57		22, 048, 9

STAMPS FOR TOBACCO, SNUFF, AND CIGARS.

To stamps on hand June 30, 1882.....	12, 073, 867 67	By stamps sent to collectors	49, 134, 4
To stamps received from printers ...	57, 620, 747 12	Amount stamps delivered for imprint under act of March 3, 1883...	15, 998, 4
To stamps returned by collectors ...	6, 834, 749 98	By stamps destroyed by committee.	939, 8
To stamps received for redemption..	1, 051 63	By amount of exportation stamps on hand, value abolished by act August 8, 1882	2, 8
To stamps received for exchange ...	2, 158 46	By stamps on hand June 30, 1883....	10, 456, 9
	76, 532, 574 86		76, 532, 5

STAMPED FOIL WRAPPERS.

To wrappers received from printer.	330, 917 12	By wrappers sent to collectors.....	330, 9

STAMPED PAPER LABELS.

To labels received from printers ...	2, 128 80	By labels sent to collectors.....	2, 1

DOCUMENTARY AND PROPRIETARY STAMPS.

To stamps on hand June 30, 1882...	1, 296, 514 52	By stamps sent to agents	3, 556, 5
To stamps received from printers..	6, 950, 908 78	By amount cash deposited.....	8, 164, 4
To stamps returned for exchange..	22, 549 52	By amount allowed as commissions.	194, 7
To stamps returned for redemption.	6, 383 48	By stamps destroyed by committee.	33, 5
To stamps returned by agents.....	4, 619 72	By stamps issued in exchange.....	22, 5
		By stamps on hand June 30, 1883....	1, 300, 1
	8, 280, 976 02		8, 280, 9

Stamps, paper, and dies.—The following accounts were adjusted, be expenses incurred for dies and paper and for the engraving and pr ing of internal-revenue stamps, &c.:

Bureau of Engraving and Printing	$443, 36
The Fairchild Paper Company	45, 65
Treasury Department	56
John J. Crooke	5, 12

Miscellaneous expenses.—The following sums embrace payments m by collectors of internal revenue and revenue agents for the detect of frauds upon the revenue; also disbursements made by T. J. Ho for the counting and issuing of stamps, and for other expenses incid to the collection of the internal revenue:

Salary	$92, 20
Traveling expenses	19, 65
Expenses (incidental)	23, 09
Stationery	15, 76
Telegrams	2, 06
Rent	4, 99
Expressage	8, 34
Counsel fees and expenses	7, 83
Rewards	8, 27
Surveyors of distilleries	5, 06
Salaries in office of the Commissioner of Internal Revenue	293, 15
Salaries in office of the Commissioner of Internal Revenue (reimbursable)	5, 19
Fees and expenses of gaugers prior to July 1, 1882	39, 96
Fees and expenses of gaugers	804, 51

An adjustment of the accounts of 93 stamp agents shows a deposi $4,473,806.53.

Seven hundred and seventy-eight claims for the redemption of stan amounting to $33,538.92, were settled during the year, from wl $671.34 were discounted, leaving $32,867.58 actually paid.

By the last report the Secretary of the Treasury had on deposit to credit, on account of "fines, penalties, and forfeitures," a balanc

$153,847.94. During the year $223,075.44 have been deposited and $235,668.11 disbursed, leaving a balance to his credit January 1, 1883, of $141,255.27. The balance to his credit January 1, 1881, on account of "offers in compromise" (special deposit account No. 5) was $38,873.61. During the year $440,073.09 were deposited and $418,499.90 disbursed, leaving a balance to his credit January 1, 1883, of $60,466.96.

Accounts were adjusted for the following sums refunded: Taxes erroneously assessed and collected, $662,328.40; drawback on merchandise exported, $58,219.20; claims for rebate of tax on tobacco, snuff, and cigars, $151,559.18, and "surplus proceeds" of lands sold for taxes in the insurrectionary States, $8,179.65.

Moneys refunded on lands sold for taxes and moneys illegally collected in the insurrectionary States amount to $1,436.18.

Accounts have been adjusted with the States of Colorado, Delaware, Kansas, Nebraska, Nevada, and Oregon, on account of direct tax imposed by the act of August 5, 1861.

The disbursements by George Waterhouse, chairman of the South Carolina free-school fund commissioners, amounted to $2,224.

Disbursing clerks' accounts.—Accounts rendered by R. C. Morgan, disbursing clerk of the Department of State, have been adjusted as follows:

Publications of consular and other commercial reports, 1882, $5,607.18; 1883, $14,478.78	$20,085 96
Editing, publishing, and distributing Revised and Annual Statutes, 1883	3,016 88
Books and maps, 1882, $18.50; 1883, $2,331.32	2,349 82
Removal and rearrangement of records, 1883	1,000 00
Monument to Thomas Jefferson at Monticello, Va	8,169 89
Observance of the centennial anniversary of the surrender of Lord Cornwallis at Yorktown, Va	31,383 42
Stationery and furniture, 1882, $985.95; 1883, $3,568.58	4,554 53
Proof-reading and packing laws, 1882, $525.05; 1883, $313.63	838 68
Lithographing, 1882, $318.55; 1883, $842.11	1,160 66
Purchase of the Franklin collection of books and papers	413 11
Publication of information in aid of Societies of the Red Cross	49 43

Accounts rendered by Richard Joseph, (late) disbursing clerk of the Department of the Interior, have been adjusted as follows:

Furniture and fixtures, National Museum, 1881, $112.50; 1882, $55,619.06; 1883, $53,160.87	$108,892 43
Preservation of collections, National Museum, 1883	78,281 88
Preservation of collections, National Museum (Armory Building), 1883	1,879 83
Preservation of collections, Smithsonian Institution, 1881, $25.; 1882, $32,882.19	32,907 19
Preservation of collections, Smithsonian Institution (Armory Building), 1882	19 04
Scientific library, office of Commissioner of Patents, 1882, $3,280.22; 1883, $3,034.57	6,314 79
Photolithographing, office of Commissioner of Patents, 1882, $3,224.54; 1883, $48,781.02	52,005 56
Copies of drawings, office of Commissioner of Patents, 1882, $824.93; 1883, $26,022.72	26,847 65
Contingent expenses, office of Commissioner of Patents, 1882, $15,257.65; 1883, $19,800.88	35,058 53
Plates for Patent Office Official Gazette, 1881, $722.15; 1882, $1,120.50; 1883, $26,576.40	28,419 05
Reimbursements to the American Photolithographic Company	2,000 00
Publishing the Biennial Register	26 00
Expenses for packing and distributing official documents, 1883	4 88
Expenses of the Tenth Census	1,618,891 58
Expenses of the Tenth Census, printing and engraving, 1882, $34,120.57; 1883, $11,810.08	45,930 65

Accounts rendered by George W. Evans, disbursing clerk of the Department of the Interior, have been adjusted as follows:

Plates for Patent Office Official Gazette, 1883	$5,423 0
Preservation of collections, National Museum, 1883	15,229 2
Preservation of collections, National Museum (Armory Building), 1883	399 9
Furniture and fixtures, National Museum, 1883	5,646 8
Copies of drawings, office of Commissioner of Patents, 1883	3,325 5
Photolithographing, office of Commissioner of Patents, 1883	11,218 9
Scientific library, office of Commissioner of Patents, 1883	1,719 8
Contingent expenses, office of Commissioner of Patents, 1883	3,787 5
Expenses of the Tenth Census, printing and engraving, 1882, $2.397.30; 1883, $173.50	2,570 8

Other acccounts received from the Census Office have been adjusted as follows:

H. A. Gill, disbursing agent	$7,030 0
Union Pacific Railway Company	75 0

Accounts rendered by J. O. P. Burnside, disbursing clerk of the Post-Office Department, have been adjusted as follows:

Publication of Official Postal Guide, 1883	$21,100 3
Publication of post-route maps, 1883	3,900 4
Miscellaneous expenses, Money-Order Office, 1883	5,444 7
Telegraphing, 1880, $318.37; 1882, $2,218,71; 1883, $1,084.93	3,622 0
Stationery, 1883	7,302 0
Furniture, 1883	3,982 6
Gas, 1880, $178.20; 1883, $3,014.42	3,192 6
Carpets, 1883	3,998 5
Hardware, 1883	1,073 3
Rent, 1883	4,247 3
Fuel, 1882, $2,692.37; 1883, $4,288.62	6,980 9
Painting, 1883	3,999 8
Plumbing and gas fixtures, 1883	2,016 7
Keeping horses, and repair of wagons and harness, 1881, $274.32; 1882, $336.27; 1883, $591.75	1,202 3
Miscellaneous items, 1881, $139.75; 1882, $9,993.94; 1883, $9,102.17	19,235 8

Accounts rendered by Thomas J. Hobbs, disbursing clerk of the Treasury Department, have been adjusted as follows:

International exchanges, Smithsonian Institution, 1883	$5,000 0

I have the honor to be,
Very respectfully, your obedient servant,

D. S. ALEXANDER,
Auditor.

Hon. CHARLES J. FOLGER,
Secretary of the Treasury.

REPORT OF THE SIXTH AUDITOR OF THE TREASURY.

OFFICE OF THE AUDITOR OF THE TREASURY
FOR THE POST-OFFICE DEPARTMENT,
Washington, D. C., November 8,1883.

SIR: I have the honor to submit the report of the business operations of this office for the fiscal year ended June 30, 1883.

My annual report to the Postmaster-General exhibits in detail the financial transactions of the Post-Office Department during the last fiscal year. The following is a summary* of the principal labors of the divisions of this office during the last fiscal year, viz:

* * * * * * *

NUMBER of GENERAL POSTAL ACCOUNTS of POSTMASTERS, the INCREASE in the NUMBER, and the CLASSIFICATION of the OFFICES, for the fiscal year ended June 30, 1883.

States.	First, second, and third class offices.				Fourth class offices.	Total in each State.	Increase.	First, second, and third class offices.			Fourth class offices.		
	Special.	Depository.	Depositing.	Total.	Depositing.			Letter carriers.	Railway postal clerks.	Mail messengers.	Railway postal clerks.	Mail messengers.	Special mail carriers.
Alabama	....	2	18	20	1,299	1,319	59	1	4	8	....	49	69
Alaska Territory	....	....	....	....	5	5	1	....	....	....	....	....	1
Arizona Territory	....	....	5	5	125	130	9	....	....	1	1	7	5
Arkansas	....	1	14	15	1,003	1,018	44	1	4	5	....	17	15
California	1	....	56	57	917	974	31	3	5	25	1	47	57
Colorado	....	1	37	38	448	486	50	2	6	15	....	42	41
Connecticut	....	2	51	53	406	459	12	4	6	28	1	76	8
Dakota Territory	....	1	19	20	702	722	181	....	8	7	1	24	79
Delaware	....	....	7	7	112	119	2	1	1	6	3	10	1
District of Columbia	1	....	....	1	5	6	1	1	1	1	....	1	1
Florida	....	1	12	13	426	439	49	1	4	6	2	29	28
Georgia	....	2	26	28	1,265	1,293	56	4	10	12	5	24	39
Idaho Territory	....	1	1	2	141	143	11	....	....	....	....	20	17
Illinois	1	2	183	186	1,924	2,110	34	7	33	110	....	196	38
Indiana	....	4	83	87	1,700	1,787	53	7	19	63	....	195	71
Indian Territory	....	....	....	....	123	123	12	....	....	....	....	....	4
Iowa	....	5	115	120	1,458	1,578	22	8	28	75	5	168	22
Kansas	....	1	78	79	1,486	1,565	3	3	15	51	....	102	23
Kentucky	....	2	32	34	1,561	1,595	80	3	7	11	....	41	144
Louisiana	1	....	13	14	517	531	14	1	4	6	....	68	28
Maine	....	3	28	31	946	977	21	4	7	12	1	77	41
Maryland	1	....	18	19	780	799	49	1	10	7	....	49	41
Massachusetts	1	2	113	116	658	774	†1	14	7	57	....	129	25
Michigan	....	5	101	106	1,423	1,529	51	7	16	65	....	172	144
Minnesota	....	2	49	51	999	1,050	26	2	15	30	1	91	172
Mississippi	....	1	22	23	788	811	25	....	5	8	....	39	30
Missouri	1	....	65	66	1,848	1,914	46	4	13	41	4	65	35
Montana Territory	....	1	8	9	191	200	6	....	....	1	1	11	9
Nebraska	....	1	38	39	836	875	34	2	7	23	....	87	14
Nevada	....	....	11	11	128	139	6	....	1	2	....	1	8
New Hampshire	....	2	28	30	460	490	9	2	4	16	1	64	11
New Jersey	....	1	57	58	665	723	11	7	3	28	3	149	48
New Mexico Territory	....	1	5	6	169	175	2	....	1	2	....	14	29
New York	2	10	196	208	2,874	3,082	50	15	36	136	5	527	196
North Carolina	....	1	17	18	1,680	1,698	96	1	7	10	....	44	165
Ohio	1	4	129	134	2,487	2,621	68	12	25	95	....	246	97
Oregon	....	1	11	12	399	411	14	1	1	5	....	16	12
Pennsylvania	1	6	147	154	3,591	3,745	155	14	38	90	....	430	132

*Much of the matter here referred to is omitted for want of space, but it will all be found in the pamphlet edition of the Auditor's report.

†Decrease.

NUMBER of GENERAL POSTAL ACCOUNTS of POSTMASTERS, &c.—Cont'd.

Name.	First, second, and third class offices.				Fourth class offices.	Total in each State.	Increase.	First, second, and third class offices.			Fourth class offices.		
	Special.	Depository.	Depositing.	Total.	Depositing.			Letter-carriers.	Railway postal clerks.	Mail messengers.	Railway postal clerks.	Mail messengers.	Special mail carriers.
Rhode Island	....	1	10	11	111	122	1	3	1	6	....	26	6
South Carolina	....	1	15	16	757	773	21	1	7	9	....	35	34
Tennessee	....	3	18	21	1,726	1,747	113	3	17	15	1	52	117
Texas	....	2	59	61	1,404	1,465	20	5	10	20	2	68	33
Utah Territory	....	1	6	7	218	225	7	....	2	3	....	32	12
Vermont	....	4	23	27	482	509	11	1	7	14	....	69	11
Virginia	....	1	27	28	1,876	1,904	62	4	9	19	....	93	81
Washington Territory	....	1	7	8	288	296	14	....	3	4	....	9	32
West Virginia	....	1	12	13	1,031	1,044	49	1	5	6	....	31	41
Wisconsin	....	2	76	78	1,352	1,430	33	4	20	51	....	132	107
Wyoming Territory	....	1	3	4	90	94	14	....	....	.....	....	2	8
Total	11	84	2,049	2,144	45,880	48,024	.....	155	432	1,204	38	3,886	2,271
Increase	....	....	.....	182	1,541	1,723	.....	43	61	202	136	252	141

NUMBER of CHANGES of POST-OFFICES and POSTMASTERS during the fiscal year ended June 30, 1883.

Offices established and re-established	**3,301**
Offices discontinued	**1,578**
New bonds given by postmasters	**1,668**
Miscellaneous changes	**10,947**
Total	**17,494**
Increase	**1,522**
Accounts of late postmasters adjusted during the year	**14,860**
Accounts of late postmasters unadjusted at close of fiscal year	**10,777**
Total	**25,637**
Increase in number of late accounts	**3,013**

STATEMENT showing TRANSACTIONS in MONEY ORDERS during the fiscal year ended June 30, 1883.

	Number.	Value.	Increase.		Decrease.	
			Number.	Value.	Number.	Value.
Number of money-order statements received, examined, filed, and registered	308,204		38,655			
Money orders issued:						
Domestic	8,807,556	$117,329,406 31	386,687	$3,929,288 10		
Canadian, international	48,094	1,016,598 62			135	2,043 00
British, international	220,624	3,194,126 04	38,331	453,764 55		
German, international	151,962	2,450,969 43	35,592	393,264 01		
Swiss, international	13,541	272,512 83	3,461	66,692 77		
Italian, international	23,418	640,035 35	9,185	231,813 75		
French, international	7,672	121,805 30	1,657	22,067 20		
Jamaica, international	136	2,628 62	91	1,711 39		
New Zealand, international	169	4,837 41	107	3,275 08		
New South Wales, international	115	2,804 47	46	458 72		
Belgian, international	413	7,863 74	413	7,863 74		
Tasmanian, international	5	91 52	5	91 52		
India, international	53	882 83	53	882 83		
Victoria, international	124	2,675 35	77	1,474 52		
Money orders paid, received, examined, assorted, checked, and filed:						
Domestic	8,602,625	116,498,702 04	200,957	3,893,490 20		
Canadian, international	65,809	1,014,887 79	16,272	229,561 78		
British, international	29,546	483,142 94	4,606	75,376 01		
German, international	41,187	1,242,478 84	6,213	194,538 07		
Swiss, international	4,271	124,380 07	251	11,088 02		
Italian, international	724	19,979 89		363 02	14	
French, international	3,128	71,296 09	400	13,943 30		
Jamaica, international	775	18,204 97	478	9,920 84		
New Zealand, international	1,275	19,685 22	848	10,482 75		
New South Wales, international	532	11,685 44	439	9,608 39		
Belgian, international	371	9,390 10	371	9,390 10		
Tasmanian, international	26	471 36	26	471 36		
India, international	343	4,213 87	343	4,213 87		
Victoria, international	465	10,584 13	336	7,980 41		
Money orders repaid, received, examined, assorted, checked, and filed:						
Domestic	63,269	845,579 74		62,573 68		
Canadian, international	312	5,007 08		710 35		
British, international	623	8,681 02		3,210 06		
German, international	1,062	15,098 09		4,676 94		
Swiss, international	56	918 62		59 57		
Italian, international	69	1,403 36		687 38		
French, international	79	1,395 12		550 02		
Jamaica, international	2	73 05	2	73 05		
New Zealand, international						
New South Wales, international	4	200 00	4	200 00		
Belgian, international						
Tasmanian, international						
India, international	1	10 00	1	10 00		
Victoria, international						
Certificates of deposits received, registered, compared, and checked	574,032	92,166,154 24	44,050	4,778,425 74		
Transfers received, registered, compared, and checked	12,081	1,676,527 00		18,614 51	1	
Drafts received, registered, compared, and checked	24,319	11,395,734 87	1,234	572,534 41		
Remittances received, registered, compared, and checked	1,258	334,618 18	30			63,607 89
International lists of orders of United States issue received, examined, registered, and checked:						
Canadian	232	770,673 41	91	287,781 19		
British	267	2,674,922 93			62	334,508 27
German	275	2,943,121 15	58	1,013,371 64		
Swiss	189	265,464 12	18	69,350 01		
Italian	169	613,065 52	28	251,924 89		
French	18	146,170 57	6	80,429 44		
Jamaica	34	2,060 29	25	1,599 23		
New Zealand	17	5,618 14	14	5,008 84		
Belgian	26	4,354 04	26	4,354 04		
New South Wales	14	3,640 84	11	3,102 55		

STATEMENT showing TRANSACTIONS in MONEY ORDERS during the fiscal year ending June 30, 1883—Continued.

	Number.	Value.	Increase.		Decrease.	
			Number.	Value.	Number.	Value.
International lists of orders of United States issue received, examined, registered, and checked—Continued.						
India	30	$625 60	30	$625 60	.....	.....
Victoria	11	2,148 31	8	1,827 11	.....	.....
International lists of orders of foreign issue received, examined, registered, and checked:						
Canadian	345	263,382 23	103	273,200 52	.....	.....
British	181	394,189 84	.....	.....	68	$69,031 63
German	260	1,541,183 31	51	532,398 35	.....	.....
Swiss	210	131,033 45	54	.....	.....	19,744 58
Italian	104	21,236 97	.....	3,239 66	.....	.....
French	18	87,385 81	6	54,245 12	.....	.....
Jamaica	37	15,519 03	29	10,049 03	.....	.....
New Zealand	34	24,168 36	27	16,460 75	.....	.....
Belgian	39	6,646 91	39	6,646 91	.....	.....
New South Wales	14	11,201 06	11	9,734 15	.....	.....
India	36	4,631 21	36	4,631 21	.....	.....
Victoria	13	8,607 33	10	6,636 51	.....	.....
International accounts received, examined, registered, and adjusted:						
Canadian	3	1,394,055 64	1	561,073 71	.....	.....
British	10	3,069,112 77	4	.....	.....	403,539 90
German	5	4,484,304 46	1	1,545,769 99	.....	.....
Swiss	4	396,497 57	1	49,611 46	.....	.....
Italian	4	634,302 49	.....	255,164 55	.....	.....
French	6	233,550 38	2	134,674 56	.....	.....
Jamaica	4	17,579 32	3	11,648 86	.....	.....
New Zealand	5	29,786 50	4	21,469 59	.....	.....
Belgian	1	11,000 95	1	11,000 95	.....	.....
New South Wales	4	14,841 00	3	12,836 70	.....	.....
India	9	5,256 81	9	5,256 81	.....	.....
Victoria	3	10,755 64	2	8,463 62	.....	.....
Money orders withdrawn for examination and returned	2,112	.....	130	.....	.....	.....
Advices sent for, examined, and returned	21,125	.....	1,985	.....	.....	.....
Money orders returned for correction	36,975	.....	850	.....	.....	.....
Money-order accounts prepared, entered, and submitted for suit	7	3,877 93	.....	477 36	4	.....
Letters written and transmitted	7,720	.....	710	.....	.....	.....
Commission and error circulars transmitted	195,240	.....	41,212	.....	.....	.....

* * * * * * *

BALANCES RECEIVED by the UNITED STATES on SETTLEMENT of POSTAL ACCOUNTS with FOREIGN GOVERNMENTS.

Great Britain, 1881-'82	$143,407 31
Canada	12,051 13
Japan	2,377 30
Mexico	2,645 85
Spain, 1881-'82	924 94
Bermuda, 1881-'82	544 73
Curacoa, 1881-'82	243 76
Bahama, 1881-'82	220 65
New South Wales	253 11
Norway	101 90
Hong-Kong	85 31
Chili, 1881-'82	70 14
Republic of Honduras, 1881-'82	82 87
Switzerland	39 18
Singapore	11 67
Victoria	158 20
Jamaica	735 83
Total amount received	163,953 88

BALANCES PAID FOREIGN GOVERNMENTS on the SETTLEMENT of POSTAL ACCOUNTS.

Belgium	$16,136 46
Germany	8,802 96
Denmark	5,216 94
France	4,176 30
Italy	4,100 86
Sweden	1,253 16
St. Thomas, 1881–'82	1,507 79
Brazil, 1881–'82	611 24
Austria	582 62
Roumania	297 08
Total amount paid	42,685 41

* * * * * * *

During the past year there has been a very great addition to the current work of the office, besides the extra work caused by the preparation of all that part of the Biennial Register relating to mail transportation and the compensation of postmasters, and the readjustment of nearly forty-six thousand accounts caused by the change in commissions of postmasters of the fourth class. The addition to the current work was caused by new mail routes, increase in the number of failing mail contractors, changed methods of payment occasioned by changes in the laws, by the addition of sixteen hundred and thirty-two new post-offices, and the increase of business in every post-office, and nearly every branch of the Post-Office Department. The following table prepared last year, at your direction, shows the disproportion between the increase of the business and the increase of the force of this office since July 1, 1860.

CONDENSED COMPARATIVE STATEMENT of the WORK of the OFFICE, from July 1, 1860, to June 30, 1882.

Year.	No. of quarterly postal accounts.	No. of clerks on postal accounts.	No. of postal accounts per clerk.	Aggregate number of all accounts including M. O.	Cost of adjustment per 1,000 accounts.	No. of money orders issued and audited.	No. of money-order clerks.	No. of money orders per clerk.
1861	148,735	130	1,144	148,735	$1,165 00	.....	.....	.....
1862	112,650	134	840	112,650	1,611 00	.....	.....	.....
1863	117,260	134	875	117,260	1,558 00	.....	.....	.....
1864	119,824	135	888	119,824	1,535 00	.....	.....	.....
1865	117,263	134	875	124,647	1,462 00	74,277	6	12,379
1866	125,887	135	932	148,778	1,305 00	243,609	6	40,601
1867	140,827	132	1,067	184,143	1,041 00	474,496	9	52,722
1868	152,096	128	1,188	215,224	898 00	831,937	13	63,995
1869	155,773	131	1,189	243,393	943 00	1,264,143	34	37,181
1870	157,037	125	1,256	255,277	892 00	1,671,981	40	41,799
1871	167,027	115	1,452	276,248	829 00	2,151,794	50	43,035
1872	176,280	115	1,533	301,276	799 00	2,573,349	58	44,368
1873	189,444	125	1,515	328,923	811 00	3,447,533	73	47,226
1874	201,036	122	1,648	360,252	782 00	4,533,247	87	52,106
1875	209,101	134	1,560	372,205	778 00	5,108,573	90	56,762
1876	219,458	143	1,535	396,962	782 00	5,108,009	90	56,756
1877	226,776	139	1,631	419,072	711 00	5,030,657	84	59,889
1878	236,122	134	1,762	448,231	693 00	5,733,905	99	57,918
1879	251,752	139	1,811	477,000	673 00	6,509,331	104	62,590
1880	271,509	139	1,954	504,111	637 00	7,461,909	104	71,748
1881	292,198	150	1,948	540,262	638 00	7,954,330	109	72,975
1882	307,399	156	1,970	576,948	622 00	8,798,312	114	77,178

With the diligent and faithful work of the clerks, extended beyond the required hours, it has been found impossible to keep up the current work in all the divisions of the office. In the money-order division the change in fees and the introduction of postal notes has added greatly to

the current work, besides the regular increase of business and the addition of four hundred and twenty-one new money-order offices. The work of this division has been performed under difficulties, caused by being moved into a building without casing for its files, and where the carpenters have been at work, in one room after another, putting up casing during the whole year. This new building is not large enough for the force required at the present time. The narrow hallways are already filled with casing for files, and there is no space in the building for the books in almost daily use. Another building, in addition to the present one, is an immediate necessity for the money-order business. It should be made large enough to accommodate the Auditor's office, and be under the control of the Department which furnishes its working force.

Respectfully,

J. H. ELA,
Auditor.

Hon. CHARLES J. FOLGER,
Secretary of the Treasury.

REPORT OF THE TREASURER OF THE UNITED STATES.

TREASURY OF THE UNITED STATES,
Washington, D. C., November 1, 1883.

SIR: The following report, showing the operations of the Treasury of the United States for the fiscal year 1883, and its condition on June 30, 1883, is respectfully submitted:

SUMMARY OF OPERATIONS.

The receipts of the Government show an increase over those of 1882 in the revenue from sales of public lands only; the amount of this increase was $3,202,724.05. The decrease in the revenue from customs was $5,704,233.32; from internal revenue, $1,777,226.47, and from miscellaneous sources, $958,932.59; making a decrease in the net revenue of $5,237,668.33. The total net revenue was $398,287,581.95.

The net expenditures amounted to $265,408,137.54, an increase over those of 1882 of $7,426,697.97, which added to the decrease in the net revenue, makes a decrease in the surplus revenue applicable to the reduction of the public debt of $12,664,366.30. The increase in expenditures was, on account of civil and miscellaneous, $11,458,271.23; on account of War Department, $5,340,888.74; on account of Navy Department, $251,390.91; and on account of Interior Department, $2,293,222.63. The expenditures on account of interest on the public debt show a decrease of $11,917,075.54—from $71,077,206.79 in 1882, to $59,160,131.25 in 1883.

The amount standing to the credit of disbursing officers of the United States on the books of the Treasury at the close of the year was $37,939,769.06.

The receipts on account of the Post-Office Department for the fiscal year were $46,046,342.89, and the expenditures $43,311,358.49. Of these amounts, $23,095,914.63 was received and expended by postmasters without being deposited in the Treasury.

The unavailable funds of the Treasury decreased from $29,517,275.32

to $29,514,665.44, or $2,609.88; and the unavailable funds of the Post-Office Department from $40,078.06 to $37,277.06, or $2,801.

The amount collected from national banks on account of semi-annual duty accruing on their capital, circulation, and deposits during the first half of the fiscal year was $4,611,252.03, and on account of duty accruing on their circulation for the second half of the year $1,564,521.59. The total amount collected on this account since the beginning of the national-banking system is $124,181,479.87.

At the close of the fiscal year there were in the custody of this office $373,712,500 in United States bonds held in trust for national banks, of which $356,596,500 were held as security for circulation, a decrease of $4,126,200 from the amount so held at the close of the previous year; $17,116,000 were held as security for public moneys deposited with national-bank depositaries. During the year $268,035,400 in bonds were deposited for these purposes and $270,970,600 withdrawn; a total movement of bonds of $539,006,000, and an increase of $280,903,500 over the movement of the previous year.

The amount of United States currency outstanding at the close of the year was $362,403,315.14. There was redeemed during the year $130,180,7599.6 in United States currency, silver certificates, and gold certificates of the new issue, making the total redemptions since the first issue of currency $2,407,590,868.22.

The issues of silver certificates amounted to $35,040,000 during the year, and the redemptions were $12,519,879, leaving the amount nominally outstanding at the close of the year, $88,616,831.

Of the gold certificates authorized by the act of July 12, 1882, there were issued $86,710,000, and redeemed $7,834,900; leaving nominally outstanding $78,875,100, which added to the amount of gold certificates of the old issue in circulation, $3,503,540, makes a total of $82,378,640.

Coupons from United States bonds amounting to $9,562,689.26 were paid at the various offices of the Treasury during the year and forwarded to the Treasurer's office for examination; and there were issued in payment of interest on registered bonds 298,380 checks on the Treasurer and assistant treasurers of the United States amounting to $48,003,130.19.

There were also issued 42,018 drafts on warrants of the Secretary of the Treasury, 48,268 drafts on warrants of the Postmaster-General, and 61,767 transfer checks on assistant treasurers, making a total of 450,433 drafts and checks issued from this office during the year.

Bonds of the United States to the amount of $134,009,750 were redeemed during the year, $44,850,700 of which amount was applied to the sinking fund. There were also retired, by exchange into 3 per cent. bonds authorized by the act of July 12, 1882, $304,252,000 of the bonds formerly bearing 3½ per cent. The total amount of bonds retired by purchase, redemption, conversion, or exchange from March 11, 1869, to June 30, 1883, is $2,587,811,000.

Circulating notes of national banks amounting to $102,699,677 were received for redemption during the year, making the total receipts of these notes since the passage of the act of June 20, 1874, $1,278,278,153. Of the amount received during the year $23,552,279 was in notes of ailed, liquidating, and reducing banks.

THE STATE OF THE TREASURY.

The following statement shows the condition of the Treasury at the close of September in each of the last four years:

	September 30, 1880.	September 30, 1881.	September 30, 1882.	September 30, 1883.
ASSETS.				
Gold Coin	$68,868,091 10	$77,338,888 71	$102,212,334 49	$146,060,376 83
Gold Bullion	66,772,094 67	97,453,477 70	50,835,629 63	60,082,067 21
Standard Silver Dollars	47,784,744 00	65,949,279 00	92,025,350 00	114,576,044 00
Fractional Silver Coin	24,723,892 68	26,343,477 17	27,429,246 56	26,792,519 83
Silver Bullion	6,154,302 93	2,622,676 18	3,641,589 37	5,010,801 58
Gold Certificates	31,600 00	10,100 00	.....	28,288,890 00
Silver Certificates	6,092,579 00	11,309,470 00	8,243,830 00	15,060,410 00
United States Notes	27,901,594 07	28,422,169 89	32,918,253 77	38,125,122 48
National-Bank Notes	3,288,404 57	4,457,713 59	6,810,338 08	6,301,907 43
National-Bank Gold-Notes	220,125 00	98,545 00	480 00	.....
Fractional Currency	60,712 08	22,973 03	8,459 52	5,772 44
Deposits held by National-Bank Depositaries	11,212,315 94	12,677,454 48	12,848,870 74	14,281,703 01
Minor Coin	1,063,665 22	552,585 06	504,515 29	523,437 33
New York and San Francisco Exchange	1,443,000 00	1,483,000 00	1,300,000 00	.....
One and Two Year Notes, &c	325 50	10 50	1,127 52	100 26
Redeemed Certificates of Deposit (Act of June 8, 1872)	90,000 00	210,000 00	240,000 00	80,000 00
Quarterly Interest Checks and Coin Coupons paid	141,517 91	193,452 68	166,361 31	196,092 97
Registered and Unclaimed Interest paid	10,303 50	900 00	2,610 00	.....
United States Bonds and Interest	997,343 81	2,016,876 70	6,527,231 51	.....
Interest on District of Columbia Bonds	3,047 12	1,770 25	2,002 83	817 30
Speaker's Certificates	126,315 00	116,916 00	138,841 00	140,544 87
Deficits, Unavailable Funds	690,848 30	790,274 17	695,916 77	694,710 31
Total	267,676,912 40	331,981,210 11	346,552,990 39	456,119,817 85
LIABILITIES.				
Post-Office Department Account	$2,600,489 16	$3,617,703 79	$6,157,625 54	$7,610,127 41
Disbursing Officers' Balances	22,189,236 49	21,916,110 81	27,756,493 83	31,681,884 20
Fund for redemption of Notes of National Banks failed, in liquidation, and reducing circulation	19,746,955 25	31,152,713 60	38,507,029 10	36,415,308 10
Undistributed Assets of failed National Banks	616,560 21	399,835 68	867,276 57	357,248 43
Five per cent. Fund for Redemption of National-Bank Notes	15,428,010 82	15,768,662 75	15,085,182 67	14,623,314 29
Fund for Redemption of National-Bank Gold-Notes	475,965 00	394,847 00	344,729 00	239,914 00
Currency and Minor-Coin Redemption Account	3,075 60	7,176 11	4,118 05	8,001 10
Fractional Silver-Coin Redemption Account	74,681 75	75,320 70	63,916 45	75,972 80
Interest Account	99,585 00	.....	.....	.....
Interest Account, Pacific Railroads and Louisville and Portland Canal Company	8,400 00	4,930 00	5,080 00	4,080 00
Treasurer United States, Agent for paying Interest on District of Columbia Bonds	366,532 59	253,795 34	244,671 50	52,050 44
Treasurer's Transfer Checks and Drafts outstanding	4,216,845 94	5,475,492 11	8,337,984 52	4,379,789 76
Treasurer's General Account:				
Interest due and unpaid	2,401,809 92	2,151,139 93	1,537,684 01	2,027,133 00
Matured Bonds and Interest	.....	3,004,205 94	793,690 50	541,661 90
Called Bonds and Interest	5,959,436 43	17,832,841 34	14,887,218 49	4,629,350 18
Old Debt	816,585 07	796,488 28	793,746 37	776,038 15
Gold Certificates	7,511,700 00	5,248,920 00	4,907,440 00	82,895,240 00
Silver Certificates	18,521,960 00	64,149,910 00	71,569,210 00	94,490,241 00
Certificates of Deposit (Act of June 8, 1872)	9,975,000 00	8,395,000 00	10,725,000 00	12,080,000 00
Balance, including Bullion Fund	156,664,083 17	151,336,116 73	143,964,893 79	163,232,463 09
Total	267,676,912 40	331,981,210 11	346,552,990 39	456,119,817 85

The following table shows the increase and decrease during the year ended September 30, in the various items of assets and liabilities; gold, silver, and legal-tender certificates, and the moneys held therefor, being first eliminated and offsets being made of other items similar to each other, so far as applicable:

	Assets, increase.	Liabilities, decrease.	Total.
Gold Coin and Bullion	$3,384,069 92		
Standard Silver Dollars	6,446,243 00		
Silver Bullion	1,369,212 21		
United States Notes	3,691,866 71		
Deposits in National-Bank Depositaries	1,432,832 27		
Fractional Currency and Minor Coin	12,351 91		
Speaker's Certificates	1,703 87		
Funds for the Redemption of National-Bank Notes		$2,658,404 38	
Undistributed Assets of failed National Banks		510,028 14	
Interest Account, Pacific Railroads and Louisville and Portland Canal Company		1,000 00	
Treasurer United States, Agent for paying interest on District of Columbia Bonds		191,435 53	
Treasurer's Transfer Checks and Drafts outstanding		3,958,194 76	
Treasurer's General Account:			
United States Bonds and Interest		3,982,665 40	
Old Debt		26,680 96	
Total	16,338,279 89	11,328,409 17	$27,666,689
	Assets, decrease.	Liabilities, increase.	
Fractional Silver Coin, including Redemption Account	$648,783 08		
New York and San Francisco Exchange	1,300,000 00		
National-Bank Notes	508,910 65		
Unavailable Funds	1,206 46		
Post-Office Department Account		$1,452,501 87	
Disbursing Officers' Balances		3,935,390 37	
Treasurer's General Account:			
Interest due and unpaid		552,327 33	
Total	2,458,900 19	5,940,219 57	8,399,119 76
Increased Balance			19,267,569 30

The general balance increased from $143,964,893.79 in 1882 to $163,232,463.09 in 1883, an increase of $19,267,569.30, made up in part as follows:

By an increase of $3,384,069.92 in the amount of gold coin and bullion owned by the Treasury, or from $148,140,524.12 to $151,524,594.04; there having been deducted, from the total amount held, the amount of certificates actually outstanding.

By an increase of $6,446,243 in the amount of standard silver dollars owned by the Treasury, or from $28,699,970 in 1882 to $35,146,213 in 1883; the amount of certificates actually outstanding having been deducted.

By an increase of $1,369,212.21 in the amount of silver bullion, or from $3,641,589.37 to $5,010,801.58.

By an increase of $3,691,866.71 in United States notes after providing for outstanding certificates.

By a decrease in the funds for redemption of notes of national banks from $53,936,940.77 to $51,278,536.39, or $2,658,404.38.

The fractional silver coin in the Treasury was decreased by $636,726.73, or from $27,429,246.56 in 1882 to $26,792,519.83 in 1883.

The aggregate amount of gold and silver coin and bullion held by the Treasury increased from $276,144,150.05 in 1882 to $352,510,809.45, or

$76,366,659.40, chiefly due to the new issue of gold certificates and the increase in the amount of outstanding silver certificates. The amount now held is greater than that held in 1880 by $138,207,594.07, and than that held in 1881 by $82,803,810.69. The gross assets increased from $346,552,990.39 in 1882 to $456,119,817.85, or $109,566,827.46.

THE RESERVE.

The following statement shows the excess of the cash assets of the Government over its net demand liabilities on the first day of November, 1883, compared with that on the same date in 1882:

	1882.	1883.
ASSETS.		
Gold Coin	$108,888,963 44	$147,037,092 56
Gold Bullion	50,916,780 10	62,302,847 34
Standard Silver Dollars	92,414,977 00	116,036,450 00
Fractional Silver Coin	26,749,432 45	26,712,424 15
Silver Bullion	4,012,503 27	4,936,264 86
Deposits with National-Bank Depositaries	8,738,523 16	7,987,693 27
United States Notes	20,689,196 17	37,113,037 33
National-Bank Notes	6,370,051 58	6,428,179 99
Total assets	327,780,427 17	408,644,989 50
LIABILITIES.		
Old Debt	$792,012 27	775,096 84
Called Bonds matured, and interest	9,661,510 16	3,531,342 84
Matured Bonds and interest	786,524 00	331,009 90
Interest due and not paid	5,255,170 24	2,371,276 57
Gold Certificates outstanding	11,370,270 00	52,076,180 00
Silver Certificates outstanding	65,020,450 00	85,334,381 00
Certificates of Deposit (act of June 8, 1872) outstanding	9,835,000 00	12,545,000 00
Disbursing Officers' Balances and various small accounts	24,208,117 05	24,331,528 02
Outstanding Drafts and Checks	5,635,232 31	8,379,155 26
Five per cent. Fund for redemption of National-Bank Notes	14,471,298 01	14,220,766 81
Fund for Redemption of Notes of National Banks failed, in liquidation, and reducing circulation.	38,169,253 10	35,072,219 60
Post-Office Department Account	6,823,901 04	8,253,587 24
Total Liabilities	192,628,738 18	247,821,544 08
Reserve—Excess of Assets	135,151,688 99	160,822,545 42

It will be seen that the reserve is ascertained by deducting from the cash in the Treasury the aggregate of the current liabilities other than United States notes, the amounts of certificates and other obligations nominally outstanding having been first reduced by the amounts of those held by the Treasury.

The reserve increased from $135,151,688.99 in 1882 to $160,822,545.42, due to the increase in the cash owned by the Government of $8,918,286.36 in gold coin and bullion, $4,831,403.59 in silver dollars and bullion, and $4,771,969.57 in currency; and to the decrease in the liabilities for bonds and interest of $9,486,490.52, and in the funds for redemption of national bank notes of $2,747,564.70. This aggregate increase of $30,755,714.74 is, however, reduced to $25,670,856.43 by the increase in the liabilities on account of Post-Office Department, outstanding drafts and checks and disbursing officers' balances of $4,297,020.12, and by an actual decrease in the fractional silver coin in the Treasury and the funds on deposit with national-bank depositaries of $787,838.19.

The amount of the reserve a year ago would, however, have appeared greater by $12,063,714.72, had not payment been anticipated of that

amount of called bonds, not then matured; which should be considered in making any comparison.

The following table shows, for the first day of each of the past thirteen months, the amount of the current liabilities exclusive of United States notes; the amount including such notes; and the cash in the Treasury, certificates for gold, silver and currency deposits and the moneys held for the redemption of the same, having been deducted; also the percentage of the reserve ascertained as stated above, to the United States notes outstanding, and of the cash to current liabilities including those notes.

Month.	Current liabilities, excluding United States notes and coin and currency certificates.	Current liabilities, excluding certificates and including United States notes, viz, $346,681,016.	Cash, less amount of coin and currency certificates.	Percentage of reserve to United States notes outstanding.	Percentage of cash to demand liabilities, including United States notes, certificates having been eliminated.
1882.					
November	$105,803,018 18	$452,484,034 18	$240,954,707 17	39.0	53.3
December	112,156,311 13	458,837,327 13	236,742,304 00	35.9	51.6
1883.					
January	111,908,927 79	458,589,943 79	223,700,425 05	32.2	48.8
February	105,295,921 02	451,976,937 02	226,707,110 73	35.0	50.2
March	110,604,935 34	457,285,951 34	238,201,333 89	36.8	52.1
April	108,292,907 34	454,973,923 34	240,420,177 64	38.1	52.8
May	122,080,864 40	468,761,880 40	243,783,639 91	35.1	52.0
June	116,546,697 48	463,227,713 48	244,580,843 16	36.9	52.8
July	112,105,099 61	458,786,115 61	253,111,870 34	40.7	55.2
August	105,931,897 37	452,612,913 37	258,374,204 94	44.0	57.1
September	109,370,166 29	456,051,182 29	261,665,988 79	43.9	57.4
October	107,070,088 12	453,751,104 12	259,236,856 51	43.9	57.1
November	97,865,983 08	444,546,999 08	258,688,528 50	46.4	58.2
Average for fifty-nine months	98,050,296 47	444,740,312 47	233,424,407 81	39.0	52.5

The range of the percentage of the reserve to the amount of United States notes outstanding ($346,681,016) during the period was from 32.2 per cent. in January to 46.4 per cent. in November, 1883; and the average for the four years and eleven months since the resumption of specie payments was 39 per cent.

Upon the assumption that the percentage should be computed between the cash in the Treasury and the liabilities, including United States notes, all certificates and the moneys for their redemption being excluded, the range was from 48.8 per cent. to 58.2 per cent. during the thirteen months, and averaged 52.5 per cent. for the fifty-nine months since resumption.

UNITED STATES NOTES.

The following statement shows the changes which have taken place in the denominations of United States notes outstanding at the close of each of the last four fiscal years:

Denomination.	1880.	1881.	1882.	1883.
One dollar	$20,332,332 00	$22,645,761 60	$25,720,953 60	$27,736,456 80
Two dollars	20,352,813 00	22,244,122 40	24,622,625 40	25,524,394 20
Five dollars	65,432,548 00	69,569,078 00	67,342,540 00	71,150,085 00
Ten dollars	74,916,751 00	76,990,387 00	72,784,766 00	72,732,886 00
Twenty dollars	72,143,207 00	72,271,597 00	68,657,471 00	62,346,909 00
Fifty dollars	24,808,995 00	23,702,910 00	24,191,770 00	23,985,895 00
One hundred dollars	32,797,870 00	32,947,660 00	34,469,390 00	34,302,390 00
Five hundred dollars	19,224,000 00	14,570,000 00	14,876,000 00	15,098,500 00
One thousand dollars	16,532,500 00	12,024,500 00	12,335,500 00	14,328,500 00
Five thousand dollars	680,000 00	455,000 00	420,000 00	315,000 00
Ten thousand dollars	460,000 00	260,000 00	2,260,000 00	160,000 00
Total	347,681,016 00	347,681,016 00	347,681,016 00	347,681,016 00
Less unknown denominations destroyed in sub-treasury in Chicago fire	1,000,000 00	1,000,000 00	1,000,000 00	1,000,000 00
Outstanding	346,681,016 00	346,681,016 00	346,681,016,00	346,681,016 00

There was an increase during the year of $2,015,503 in the one-dollar notes, $901,769 in two-dollar notes, $3,807,545 in five-dollar notes, $222,500 in five-hundred-dollar notes, and $1,993,000 in one-thousand-dollar notes, outstanding; and a decrease of $51,880 in ten-dollar notes, $6,310,562 in twenty-dollar notes, $205,875 in fifty-dollar notes, $167,000 in one-hundred-dollar notes, $105,000 in five-thousand-dollar notes, and $2,100,000 in ten-thousand-dollar notes.

The number of notes outstanding at the close of the year increased 2,903,607; having been 65,986,654 against 63,083,047 on June 30, 1882. The amount of ones and twos outstanding has increased $16,958,217 in the last four years.

The issues and redemptions during the last three fiscal years have been as follows:

Denomination.	1881.		1882.		1883.	
	Issued.	Redeemed.	Issued.	Redeemed.	Issued.	Redeemed.
One dollar	$9,889,034	$7,575,604 40	$11,445,524	$8,370,332 00	$11,986,114 00	$9,970,610 80
Two dollars	8,752,000	6,860,690 60	10,472,000	8,093,497 00	9,672,000 00	8,770,231 20
Five dollars	14,760,000	10,623,470 00	14,280,000	16,506,538 00	22,860,000 00	19,052,455 00
Ten dollars	9,160,000	7,086,364 00	6,680,000	10,885,621 00	14,240,000 00	14,291,880 00
Twenty dollars	6,240,000	6,111,610 00	5,680,000	9,294,126 00	6,000,000 00	12,210,562 00
Fifty dollars	1,200,000	2,306,085 00	3,200,000	2,711,140 00	3,900,000 00	4,205,875 00
One hundred dollars	2,944,300	2,794,510 00	4,527,900	3,006,170 00	4,356,600 00	4,523,600 00
Five hundred dollars	700,000	5,354,000 00	1,750,000	1,444,000 00	2,350,000 00	2,127,500 00
One thousand dollars	900,000	5,408,000 00	1,500,000	1,189,000 00	4,400,000 00	2,407,000 00
Five thousand dollars	.....	225,000 00	4,995,000	5,030,000 00	10,000,000 00	10,105,000 00
Ten thousand dollars	.....	200,000 00	14,990,000	12,990,000 00	20,000,000 00	22,100,000 00
Total	54,545,334	54,545,334 00	79,520,424	79,520,424 00	109,764,714 00	109,764,714 00

Of the notes of the denominations of $5,000 and $10,000 reported as issued and redeemed, there were passed through the accounts, for the purpose of destruction, from the reserve fund of unissued notes, $17,885,000 in 1882 and $32,000,000 in 1883, thus making the actual redemptions in 1882, $61,635,424, and in 1883, $77,764,714, an increase

of $16,129,290. The number of notes redeemed increased from 14,235,106 in 1881 to 17,362,320 in 1882 and 20,339,164 in 1883.

The following table shows the amount of United States notes received in payment of duties on imports for each month since the resumption of specie payments to September 30, 1883. The amount so received during the past fiscal year was $27,937,216, against $20,595,119 the previous year, and the aggregate of such receipts was $210,405,404, an average of $3,691,323 per month:

Month.	1879.	1880.	1881.	1882.	1883.
January	$6,864,889	$4,126,450	$1,689,738	$1,779,336	$2,121,503
February	9,340,452	4,477,161	2,049,956	1,886,585	2,000,776
March	11,919,876	3,702,727	1,830,813	1,931,273	2,770,801
April	10,562,006	3,231,697	1,310,292	2,032,592	2,061,875
May	9,703,566	2,888,138	1,402,118	2,089,339	1,677,130
June	9,336,778	3,951,588	1,479,503	2,045,150	2,671,640
July	10,588,145	4,029,892	1,641,006	2,619,515	2,278,662
August	11,261,307	2,844,658	1,873,788	2,732,499	2,476,080
September	12,506,018	2,241,305	1,476,118	2,599,294	2,032,138
October	9,281,243	1,802,288	1,353,253	2,448,314	.....
November	4,612,198	1,567,184	1,341,614	2,330,849	.....
December	3,051,219	1,405,984	1,145,065	1,903,014	.....

SILVER CERTIFICATES.

The amount of silver certificates nominally outstanding increased during the fiscal year from $66,096,710 to $88,616,831; the amount held by the Treasury increased during the same period from $11,590,620 to $15,996,145, leaving actually outstanding on June 30, 1883, $72,620,686. On September 30, 1883, the amount nominally outstanding was $94,490,241, of which the Treasury held $15,060,410. The departmental circular of September 18, 1880, authorizing the receipt of deposits of gold coin with the assistant treasurer at New York, payable in silver certificates by other assistant treasurers, continued in force until October 15, 1882, with a modification in November, 1881, due to the fact that the limit of issue (being the amount of standard dollars held by the Treasury,) had then nearly been reached. The receipt of such deposits was suspended from October 15, 1882, to March 2, 1883, when, by direction of the acting Secretary of the Treasury it was resumed, and continues to the present time. The amount of deposits made during the fiscal year was $13,095,000, payment for which was made in certificates as follows: By the Chicago office, $15,000; the Cincinnati office, $925,000; the New Orleans office, $6,140,000, and the Saint Louis office, $6,015,000. The total amount of deposits, from the commencement, under the circular of September, 1880, to June 30, 1883, was $42,949,500, and to September 30, 1883, $45,814,500.

The issues and redemptions of silver certificates of each denomination during the fiscal year have been as follows:

Denomination.	Outstanding June 30, 1882.	Issued.		Redeemed.		Outstanding June 30, 1883.
		During fiscal year.	To June 30, 1883.	During fiscal year.	To June 30, 1883.	
Ten dollars	$29,245,720	$11,880,000	$44,994,000	$4,237,828	$8,106,108	$36,887,892
Twenty dollars	24,960,240	13,360,000	40,946,000	3,167,456	5,793,216	35,152,784
Fifty dollars	3,283,550	1,600,000	5,650,000	886,615	1,653,065	3,996,935
One hundred dollars	4,020,700	2,400,000	7,540,000	1,173,480	2,292,780	5,247,220
Five hundred dollars	1,734,500	1,800,000	6,150,000	1,008,500	3,624,000	2,526,000
One thousand dollars	2,852,080	4,000,000	15,990,000	2,046,000	11,184,000	4,806,000
Total	66,096,710	35,040,000	121,270,000	12,519,879	32,653,109	88,616,831

From the commencement of the issue of silver certificates in March, 1878, to the 31st of October, 1883, there have been transferred to the offices of the several assistant treasurers, certificates to the following amounts, there being deducted from the gross amount transferred to each office any amount transferred from it: To Baltimore, $535,000; Boston, $3,410,000; Cincinnati, $15,431,000; New Orleans, $31,550,000; New York, $16,360,000; Philadelphia, $14,665,000; Saint Louis, $20,275,000; San Francisco, $19,240,000; to the Washington office, $16,246,000.

GOLD CERTIFICATES.

Of the old issue of gold certificates under the act of March 3, 1863, there were redeemed during the year $1,533,580, against $745,800 the previous year, making the total redemptions $977,631,340.46, and reducing the amount outstanding to $3,503,540.

Of the issue authorized by the act of July 12, 1882, there were issued during the fiscal year $86,710,000 and redeemed $7,834,900, leaving $78,875,100 nominally outstanding. The Treasury held $22,571,270 of that amount at the close of the year.

The following statement shows the issues and redemptions by denominations during the year:

Denominations.	Issued.	Redeemed.	Outstanding.
Twenty dollars	$9,360,000	$197,100	$9,162,900
Fifty dollars	9,200,000	149,200	9,050,800
One hundred dollars	8,900,000	135,600	8,764,400
Five hundred dollars	8,250,000	208,000	8,042,000
One thousand dollars	13,000,000	350,000	12,650,000
Five thousand dollars	8,000,000	1,035,000	6,965,000
Ten thousand dollars	30,000,000	5,760,000	24,240,000
	86,710,000	7,834,900	78,875,100

Of the issues, $71,350,000 was of the New York series and $15,360,000 of the departmental series.

On September 30, 1883, the amount issued had increased to $92,550,000, the amount redeemed to $12,905,800, and the amount held by the Treasury to $28,288,390, thus reducing the amount actually outstanding from $56,303,830 to $51,355,810, or $4,948,020 in the three months ended on that date.

EXPRESS CHARGES ON UNITED STATES MONEY.

In consequence of the failure by Congress to make appropriation for the transportation of worn and mutilated United States notes to the Treasury and of new notes in return therefor, the express charges on such notes as have been received since the beginning of the fiscal year, from others than assistant treasurers, have been borne by the parties sending them for redemption. Previous to and including 1875 appropriations for such transportation had been regularly made; but thereafter these appropriations were omitted until 1881, when the Government again assumed the expense until the close of the last fiscal year. It is natural that the holder of a note, however much it may be defaced, should hesitate to incur the expense of express charges; and thus the note will be kept in circulation as long as it can possibly be used. A note-holder in a city where there is an assistant treasurer may obtain redemption by presentation to that officer, who forwards the notes to the Treasurer at the expense of the Government, payable from another appropriation; but this does not afford equal facilities of redemption to all holders of notes; and it makes necessary an extra count, by the assistant treasurer, of money which should come directly to this office.

The Government has required of the national banks that they provide, through a deposit at the Treasury, for the redemption of their worn and mutilated notes, and they bear the expense of transportation to this office for such redemption. It would seem that the Government should do at least as much toward keeping in good condition among the people the notes of its own issue, as it requires of the banks in regard to their issues. Otherwise the United States notes now in circulation, many of them already worn and defaced, will, in a short time, become more wretched in condition and more unfit for use. The gain to the Government, and of course the corresponding loss to the holders, by non-presentation for redemption of the United States notes will be considerable, and it can well afford the comparatively small expense necessary to keep the notes in good condition. Of the first issue of legal-tender notes, amounting to $669,321,676, there remain outstanding at this date nearly $12,000,000, and this after more than fourteen years from the time the issue ceased; the redemptions for the past four years not having averaged one-fifth of 1 per cent. of the issue, or 9 per cent. of the outstanding. The gain to the Government from the losses on this and the later issues of notes, although it may not yet be stated with any certainty, will be very great.

The gold and silver certificates are also rapidly becoming defaced and worn. Although not issued as a circulating medium, but as certificates of deposit, they have, from various causes, passed into the circulation of the country. The charges for the transportation of these for redemption have never been borne by the Government; nor is it proposed now to pay any charges where redemption in coin is demanded, but it is submitted that it would be proper to furnish new certificates for those which have been defaced in handling, and that the express charges thereon be paid by the Government. Authority is asked for such payment in any appropriation that may be made.

The appropriation for the transportation of worn and mutilated notes for the year 1882 was $50,000, and for the year 1883, $48,000. It is respectfully recommended that an appropriation of $30,000 be asked for, to be available for the remainder of the present fiscal year, and $70,000 for the ensuing year, which amounts are deemed sufficient to provide for the transportation of worn and mutilated gold and silver certificates as well as of United States notes.

STANDARD SILVER DOLLARS.

The following table shows the amount of silver dollars coined, on hand, distributed, and outstanding at the close of each fiscal year since the coinage was resumed, the percentage of the total coinage outstanding and the percentage of the annual coinage distributed each year:

Fiscal year ended June 30.	Annual coinage.	Total coinage.	On hand at close of year.	Net distribution during year.	Outstanding at close of year.	Percentage of distribution to annual coinage.	Percentage of outstanding to total coinage.
1878*	$8,573,500	$8,573,500	$7,718,357	$855,143	$855,143	9.9	9.9
1879	27,227,500	35,801,000	28,358,589	6,587,268	7,442,411	24.2	20.8
1880	27,933,750	63,734,750	45,108,296	11,184,043	18,626,454	40	29.2
1881	27,637,955	91,372,705	63,249,300	9,496,951	28,123,405	35.8	30.8
1882	27,772,075	119,144,780	87,524,182	3,497,193	31,620,598	12.6	26.5
1883	28,111,119	147,255,899	112,362,510	3,272,791	34,893,389	11.6	23.7

*Coinage began in March.

The amount coined to September 30, 1883, was $154,370,899, of which there was outstanding $39,121,236, or about 25¼ per cent., the Treasury holding $114,576,044, of which $94,490,241 is for the redemption of silver certificates.

The coinage and distribution of silver dollars during each of the last twenty-seven months are shown below:

Month.	Monthly coinage.	Coined to the end of the month.	On hand at close of month.	Net distribution during month.	Outstanding at close of month.
1881.					
July	$2,250,000	$93,622,705	$65,130,646	$368,654	$28,492,059
August	2,300,000	95,922,705	66,300,847	1,129,799	29,621,858
September	2,400,000	98,322,705	65,949,279	2,751,568	32,373,426
October	2,350,000	100,672,705	67,299,481	999,798	33,373,224
November	2,300,000	102,972,705	68,620,414	979,067	34,352,291
December	2,408,275	105,380,980	70,430,857	597,832	34,950,123
1882.					
January	2,300,000	107,680,980	73,506,654		34,174,326
February	2,300,200	109,981,180	76,541,417		33,439,763
March	2,300,500	112,281,680	79,582,820		32,698,860
April	2,300,000	114,581,680	82,259,754		32,321,926
May	2,262,000	116,843,680	85,006,570		31,837,110
June	2,301,100	119,144,780	87,524,182		31,620,598
July	2,160,000	121,304,780	89,744,025		31,560,755
August	2,425,000	123,729,780	91,741,030	427,995	31,988,750
September	2,300,100	126,029,880	92,468,038	1,573,092	33,561,842
October	2,300,000	128,329,880	93,006,382	1,761,056	35,323,498
November	2,300,000	130,629,880	93,873,914	1,432,468	36,755,966
December	2,325,200	132,955,080	94,887,115	1,311,999	38,067,965
1883.					
January	2,450,000	135,405,080	98,100,185		37,304,895
February	2,400,000	137,805,080	101,093,671		36,711,409
March	2,400,619	140,205,699	104,059,101		36,146,598
April	2,350,000	142,555,699	107,059,094		35,496,605
May	2,350,000	144,905,699	109,723,838		35,181,861
June	2,350,200	147,255,899	112,362,510		34,893,389
July	2,425,000	149,680,899	113,904,649	882,861	35,776,250
August	2,340,000	152,020,899	115,002,838	1,241,811	37,018,061
September	2,350,000	154,370,899	115,249,663	2,103,175	39,121,236

NOTE.—The difference between the amount "on hand," as stated in this table, and the amount in the Treasury, as it appears in the statement of assets and liabilities (p. 7), is $673,619. Of this amount $196,000 consists of dollars not yet shipped on orders for which payment has been made, and $477,619 of dollars held in the silver profit fund of the United States Mint at San Francisco.

The amount outstanding increased from $28,492,059 in July, 1881, to $34,950,123 in December of the same year; from January to July, 1882, the return of dollars to the Treasury offices was greater than the distribution, and the amount outstanding fell to $31,560,755 in the latter month. In December, 1882, the amount outstanding exceeded $38,000,000, but fell again by the return to the Treasury of surplus dollars until in June, 1883, the amount had again fallen to $34,893,389. Since the close of the fiscal year there has been the usual increased demand, and the amount outstanding on September 30 was the highest since the coinage was resumed—exceeding $39,000,000.

The vaults of the Treasury offices are taxed to their utmost capacity to contain the funds of the Treasury, including the $114,576,044 in standard dollars, and the $26,792,519.83 in fractional silver coin. Frequent transfers of such coin are necessary from an office that has become filled to its capacity, to some office in which vault room can be found. The construction of a large vault with a capacity for $45,000,000 standard dollars in the Treasury building at Washington, and of another with a capacity for $28,000,000 in the Treasury office at New Orleans has been commenced, and their completion will give relief to the now over-crowded vaults.

The amount of standard silver dollars and fractional silver coin held by each of the offices of the Treasury on September 30, 1883, is shown by the following table:

In office of—	Standard silver dollars.	Fractional silver coin.
Treasurer United States, Washington	$2,125,359	$168,983 94
Assistant Treasurer United States:		
Baltimore	2,743,895	298,090 05
Boston	2,107,362	1,617,097 65
Chicago	4,688,900	3,059,232 59
Cincinnati	979,500	105,650 00
New Orleans	5,607,980	654,039 17
New York	23,221,000	8,489,313 28
Philadelphia	8,480,900	3,397,270 00
San Francisco	15,995,000	7,520,214 35
Saint Louis	5,001,040	1,446,245 00
United States Mint:		
Carson City	2,112,755	16,694 38
New Orleans	7,290,045	84
Philadelphia	3,664,226	31,099 56
San Francisco	30,745,237	25,415 00
United States Assay-office:		
Charlotte, N. C		123 22
Helena, Mont	5,743	5,543 90
New York	3,102	90
Saint Louis		5 75
Total	114,772,044	26,835,019 58
Add amount in transit between offices		107,000 00
	114,772,044	26,942,019 58
Deduct amount required to fill orders unpaid	196,000	149,499 75
Total	114,576,044	26,792,519 83

The denominations of the fractional silver coin held at each office are shown below:

In office of—	Fifty-cent pieces.	Twenty-five-cent pieces.	Twenty-cent pieces.	Ten-cent pieces.	Five-cent pieces.	Three-cent pieces.	Unassorted.
Treasurer U. S.:							
Washington	$69,010 00	$74,310 00		$17,950 00	$1,570 80	$74 61	$6,068 53
Asst. Treasurer U. S.:							
Baltimore	254,690 00	38,795 00	$88 40	3,391 30	894 95	230 40	
Boston	1,040,148 00	558,402 00	700 00	497 00	1,700 00	600 00	15,050 65
Chicago	2,027,000 00	1,014,000 00	1,000 00	15,000 00	2,000 00		232 59
Cincinnati	43,290 00	42,080 00	278 00	300 00	1,078 00	124 00	18,500 00
New Orleans	638,431 00	14,525 00	29 60	1,042 80		10 77	
New York	5,625,000 00	2,804,000 00		12,000 00	6,000 00		42,313 28
Philadelphia	1,958,000 00	1,427,000 00		9,070 00	2,000 00	1,200 00	
San Francisco	7,170,000 00	340,800 00		718 50	12 60	75	2,682 50
Saint Louis	1,068,930 00	375,900 00	510 00	335 00	510 00	60 00	
U. S. Mint:							
Carson City	16,124 00	347 50		222 88			
New Orleans							84
Philadelphia	5,212 50	22,882 50		3,003 84			72
San Francisco	17,794 00	6,196 25		1,424 75			
U. S. Assay-office:							
Charlotte, N. C							123 22
Helena, Mont							5,543 90
Saint Louis							5 75
New York							90
Total	19,933,629 50	6,725,238 25	2,606 00	64,956 07	15,766 35	2,300 53	90,522 88

FRACTIONAL SILVER AND MINOR COIN.

There were forwarded from this office during the fiscal year by express, at the expense of the Government for the charges thereon, 4,837 packages containing $3,826,600 in fractional silver coin, in return for currency redeemed or for deposits of lawful money in the Treasury; an increase over the shipments of the previous year of 687 packages and $458,846. There were forwarded by registered mail 1,545 packages of fractional silver coin, consisting chiefly of dimes.

An appropriation of $10,000 made by the sundry civil act of March 3, 1883, for the distribution of silver coin according to law, having become immediately available, was applied to the expenses of transportation during the remainder of the past fiscal year, and thus became exhausted about the first of October. Notice was therefore given that the charges for transportation of fractional silver coin by express would thereafter have to be borne by the parties desiring such coin.

It is recommended that an appropriation be asked for to continue the distribution so that such portion of the large amount in the Treasury as is desired by the people for their convenience may be furnished without expense to them for the transportation, which should be paid out of the large profit on coinage.

Under section 3529 of the Revised Statutes the minor coin authorized by section 3515 may, at the discretion of the director of the mint, be delivered in any of the principal cities and towns of the United States at the cost of the mint for transportation. There is no provision for the payment of transportation of such coins from the Treasury; and parties desiring them are usually unwilling to incur this expense. It thus might happen that, while there was a surplus in the Treasury offices, it could not be distributed, and, at the same time, the mint would be coining to supply the demand which could be met from the Treasury if the facilities for distribution were provided. At the present time the five-cent nickel is being coined at the mint and, while there is now no large surplus in the Treasury, should the coinage and distribution continue until there was a surplus in circulation, that excess would be likely to be returned to the Treasury for redemption in lawful money and be there held unused.

Should the Mint at Philadelphia be made a redeeming agent and authorized to redeem these coins through the medium of the Treasurer's account as it did prior to 1881, and distribute them as it now does the new coins, some of the expense of coinage would, no doubt, be saved; and a provision of law giving such authority is respectfully recommended.

The three-cent piece of the minor coinage resembles the silver dime so much in size and appearance as to be troublesome; and this more than offsets any convenience that might be claimed for a piece of this denomination. Provision should be made for its redemption and retirement by recoinage into five-cent nickels.

The following table shows the denominations of the minor coin held by the Treasury offices September 30, 1883:

Held by—	Five cents.	Three cents.	Two cents.	One cent.	Mixed.	Total.
Treasurer United States, Washington	$1,300 00	$3,771 00	$290 00	$1,390 00	$846 07	$7,597 07
Assistant Treasurer United States:						
Baltimore	300 00	4,320 00	2,770 00	18,381 47	.....	25,771 47
Boston	378 00	20,985 00	295 00	17,316 00	1,544 93	40,518 93
Cincinnati	150 00	8,800 00	200 00	2,768 50	493 00	12,411 50
Chicago	8,900 00	890 00	7,500 00	11,800 00	35	29,090 35
New Orleans	610 15	601 71	36 74	1,048 28	.....	2,296 88
New York	20,565 00	16,920 00	1,430 00	34,069 00	.....	72,984 00
Philadelphia	89,554 00	87,105 00	5,550 00	121,000 00	631 00	303,840 00
San Francisco	1,000 00	1,500 00	200 00	100 00	.....	2,800 00
Saint Louis	250 00	6,886 62	75 34	2,673 84	515 04	10,400 84
United States Mint:						
Philadelphia	.....	.....	.....	.....	14,160 63	14,160 63
Denver, Colo	.....	.....	.....	.....	2 49	2 49
United States Assay-office:						
Helena, Mont	.....	.....	.....	.....	562 08	562 08
New York	.....	.....	.....	.....	73	73
Saint Louis	.....	.....	.....	.....	36	36
In transit	.....	.....	.....	.....	1,000 00	1,000 00
Total	123,007 15	151,779 33	18,347 08	210,547 09	19,756 08	523,437 33

Under the provisions of the act of August 7, 1882, appropriating $25,000 for the recoinage of uncurrent silver coins in the Treasury, and $10,000 for the recoinage of gold and silver coins under the direction of the Secretary of the Treasury, there were recoined $35,000 in gold coin, $612,779.75 in uncurrent silver three-cent, five-cent and twenty-cent pieces, $5,798.15 in foreign silver coins, and $621 in standard silver dollars, at a net loss of $34,950.04.

No appropriation for this purpose was made for the current fiscal year; and in order to recoin the accumulated uncurrent coins now in the Treasury and such as may hereafter be received, it is respectfully recommended that an appropriation of $20,000 for the recoinage of all uncurrent gold and silver coins be asked for.

FRACTIONAL CURRENCY.

There was redeemed during the year $46,556.96 in fractional currency, leaving the amount outstanding at the close of the year $15,376,629.14. The redemptions for each year since 1876, when the issue ceased, have been as follows:

1877	$14,043,458 05
1878	3,855,368 57
1879	705,158 66
1880	251,717 41
1881	109,001 05
1882	58,705 55
1883	46,556 96

MUTILATED, STOLEN, AND COUNTERFEIT CURRENCY.

The deductions on account of mutilations, from the face value of United States notes redeemed during the year, amounted to $2,232, and from fractional currency to $40.03, a total of $2,272.03 as against $12,285.68 the previous year, when the actual redemptions were less by about $16,000,000. The decrease in the deductions and the consequent decrease of the loss to note-holders resulted from the modification of the

rule subjecting such currency to a discount in proportion to the part lacking. The deductions on silver certificates redeemed amounted to $261, and on notes of failed, liquidating, and reducing national banks to $62.

There were detected in remittances of United States notes received for redemption 315 counterfeits of the nominal value of $4,828; and in remittances of national bank notes 61 notes stolen prior to regular issue with the signatures of the bank officers forged thereon amounting to $505; and 451 counterfeits, amounting to $4,396. The denominations of the counterfeits were as follows:

Denomination.	United States notes.	National-bank notes.
One dollar	$23	.....
Two dollars	50	$60
Five dollars	455	1,540
Ten dollars	800	840
Twenty dollars	1,140	600
Fifty dollars	1,400	250
One hundred dollars	400	1,100
Five hundred dollars	500	.....
Total	4,828	4,396

One counterfeit silver certificate of the denomination of $10, one counterfeit compound-interest note of $100, and counterfeit fractional currency, amounting to $282.90, were also detected in remittances received.

INTEREST CHECKS AND COUPONS.

Checks which have been issued in payment of registered interest on bonds of the United States, including the bonds issued to the Pacific railways and bonds of the District of Columbia, are returned to this office after payment, and register is made of such payment.

Heretofore such checks have, after verification, been transmitted to the auditing officer for settlement of the account and examination of the indorsements, which were in some instances found to be irregular and unsatisfactory.

Owing to the large number of interest checks, which in 1882 reached 321,623, the examination by the auditing officer with the clerical force available for that purpose was unavoidably much delayed, thereby lessening the facilities for obtaining amended indorsements, evidence of the validity of a doubtful indorsement, or the return of any amount paid thereon. It has, therefore, been deemed advisable and necessary to examine the indorsements of these checks upon their return after payment and before their delivery to the Auditor, and in all cases of irregularities to take steps at once to obtain, by the return of the checks to the office which paid them, perfection of the indorsement. Failing to obtain that, reclamation is made of the last indorser, who is required to refund the amount. There were 357 checks suspended on account of such defects during the fiscal year.

The decrease in the number of interest checks during the fiscal year from 321,623 to 298,380 is due to the redemption of loans and the gradual decrease in the number of holders of bonds; the number of the holders of the 4 per cent. registered bonds having decreased from 50,859 in October, 1882, to 48,154 in October, 1883, while the amount of interest on that loan, paid by such checks, increased from $5,659,710.50 in October, 1882, to $5,794,721 in 1883.

The number of foreign holders of registered bonds diminished during the same period from 1,131, representing $30,060,000, to 495, holding $17,198,900.

The decrease in the amount of coupons paid is due to the redemption of loans and the conversion of coupon bonds into registered bonds.

CERTIFICATES OF DEPOSIT, ACT OF JUNE 8, 1872.

During the year there were issued certificates of deposit under the act of June 8, 1872, to the amount of $20,030,000; the amount redeemed was $20,210,000, and the amount outstanding at the close of the year $13,180,000, against $13,360,000 outstanding June 30, 1882. The amount outstanding on September 30, 1883, was $11,945,000.

The following table shows the total issues and redemptions of these certificates from the date of the first issue, and the amount outstanding at the close of each fiscal year from 1873 to 1883:

Fiscal year.	Total amount issued.	Total amount redeemed.	Outstanding as shown by the Treasurer's books.
1873	$57,240,000	$25,430,000	$31,810,000
1874	137,905,000	78,915,000	58,990,000
1875	219,000,000	159,955,000	59,045,000
1876	301,400,000	268,260,000	33,140,000
1877	378,285,000	324,305,000	53,980,000
1878	464,965,000	418,720,000	46,245,000
1879	554,730,000	525,400,000	29,330,000
1880	601,785,000	588,660,000	13,125,000
1881	612,850,000	601,235,000	11,615,000
1882	629,760,000	616,400,000	13,360,000
1883	649,790,000	636,610,000	13,180,000

NOTE.—The amounts outstanding differ from those shown by the public debt statements, for the reason that the reports of issues and redemptions of the last days of the fiscal year at the different offices do not reach the Department until after the statements of the debt are made up.

CLEARING-HOUSE TRANSACTIONS.

The following statement shows the transactions of the Treasury with the New York Clearing-House for the last sixteen months:

Date.	Checks sent to clearing-house.	Checks received from clearing-house.	Balances due assistant treasurer.	Balances due clearing-house.
1882.				
July	$11,587,438 74	$32,701,010 38	$51,847 90	$21,165,419 54
August	11,989,235 62	30,384,357 32	111,659 85	18,506,781 55
September	12,521,011 04	30,736,071 62	146,102 53	18,361,163 11
October	11,753,823 68	29,758,721 56	623,006 36	18,627,904 24
November	10,888,947 91	24,758,321 16	72,043 22	13,941,416 47
December	10,382,375 99	37,878,097 20		27,495,721 21
1883.				
January	10,072,753 84	27,014,807 10	64,914 97	17,006,968 23
February	10,118,147 30	16,334,894 33	278,069 51	6,494,816 54
March	11,551,061 55	23,876,731 25	314,619 64	12,640,289 31
April	8,064,996 50	22,326,005 53		14,261,009 03
May	11,659,331 13	29,382,432 79		17,723,101 66
June	9,390,987 30	22,150,859 38		12,759,872 08
July	9,074,257 66	23,226,978 95		14,152,721 29
August	10,524,505 70	22,462,769 27	361,242 42	12,299,525 99
September	10,096,816 27	26,136,031 46		16,039,215 19
October	10,324,684 37	23,989,314 17	380,431 75	13,136,061 55
Total	170,000,374 60	422,208,423 47	2,403,938 15	254,611,987 02

The associated banks presented for payment through the clearing-house $422,208,423.47 in drafts and checks on the assistant treasurer, and paid him in cash for balances in his favor $2,403,938.15, making an aggregate of transactions of $424,612,361.62, or an average of $26,538,272.60 per month. The assistant treasurer received payment of checks upon the banks amounting to $170,000,374.60, leaving balances against him aggregating $254,611,987.02, in settlement of which he paid in gold and gold certificates, $231,245,000; in United States notes, $3,936,987.02; in deposits for silver certificates payable by other offices, $14,741,000; and in sundry credits, $4,689,000, as shown by the following table:

Months.	Paid in gold coin.	Paid in gold certificates.	Paid in United States notes.	By transfer in silver certificates.	Sundry credits.
1882.					
July	$18,400,000	.....	$480,419 54	$1,615,000	$670,000
August	10,855,000	.....	426,781 55	5,530,000	1,695,000
September	8,430,000	.....	1,381,163 11	6,856,000	1,694,000
October	3,540,000	$12,504,000	1,213,904 24	740,000	630,000
November	.....	13,847,000	94,416 47	.....	.....
December	.....	27,477,000	18,721 21	.....	.....
1883.					
January	.....	16,994,000	12,968 23	.....	.....
February	.....	6,485,000	9,816 54	.....	.....
March	.....	12,627,000	13,289 34	.....	.....
April	.....	14,249,000	12,009 03	.....	.....
May	.....	17,707,000	16,101 66	.....	.....
June	.....	12,747,000	12,872 08	.....	.....
July	.....	14,139,000	13,721 29	.....	.....
August	.....	12,199,000	100,525 99	.....	.....
September	.....	15,966,000	73,215 19	.....	.....
October	.....	13,079,000	57,061 55	.....	.....
Total	41,225,000	190,020,000	3,936,987 02	14,741,000	4,689,000

The following table shows the kinds of money received in payment of duties on imports at the port of New York during the sixteen months from July, 1882, to October, 1883:

Months.	United States notes.	Gold coin.	Gold certificates.	Silver certificates.	Silver coin.	Total duties on imports, port of New York.
1882.						
July	$1,189,000	$9,132,000	.....	$3,400,000	$9,000	$13,730,000
August	920,000	7,594,000	.....	7,951,000	22,000	16,487,000
September	813,000	5,708,000	.....	8,161,000	13,000	14,695,000
October	958,000	2,385,000	$5,532,000	4,213,000	13,000	13,101,000
November	949,000	1,021,000	6,351,000	1,607,000	11,000	9,939,000
December	693,000	554,000	7,177,000	1,947,000	10,000	10,381,000
1883.						
January	887,000	534,000	9,167,000	1,976,000	10,000	12,574,000
February	601,000	478,000	9,162,000	1,944,000	9,000	12,194,000
March	816,000	812,000	9,170,000	1,624,000	13,000	12,435,000
April	534,000	996,000	6,025,000	1,633,000	11,000	9,199,000
May	554,000	386,000	5,074,000	2,131,000	10,000	8,155,000
June	945,000	445,000	9,466,000	2,755,000	19,000	13,630,000
July	794,000	339,000	11,552,000	1,906,000	18,000	14,609,000
August	791,000	359,000	9,734,000	2,395,000	11,000	13,290,000
September	609,000	385,000	9,364,000	1,682,000	10,000	12,050,000
October	555,000	347,000	8,892,000	1,902,000	10,000	11,616,000
Total	12,608,000	31,475,000	106,576,000	47,227,000	199,000	198,085,000

SALES OF EXCHANGE.

In addition to the telegraphic orders payable in silver certificates, issued upon deposits of gold coin with the assistant treasurer at New

York, there were issued during the fiscal year for like deposits orders payable in gold, as follows: Payable at the New Orleans office, $3,050,000, on which a premium of $1,725 was realized; and payable at the San Francisco office, $2,300,000, at a premium of $190.62.

DEPOSITARY BANKS.

The public funds deposited with national-bank depositaries during the fiscal year amounted to $145,974,256.86, making the total deposits of such moneys since the establishment of the national-banking system $3,958,696,844.88. The balance remaining with them at the close of the year, to the credit of the Treasurer, amounted to $10,030,698.33, and the amount held to the credit of disbursing officers of the United States was $3,418,195.73, making a total of $13,448,894.08, to secure the safe-keeping and prompt payment of which there were held by the Treasurer in trust for such banks $17,116,000 in United States bonds.

There were at the close of the fiscal year 140 banks qualified as depositaries, thus increasing the facilities for collecting and disbursing public moneys without additional expense to the Department; their transactions with this office were conducted in a satisfactory manner, the payments promptly made at the times and places required, and no loss incurred.

The receipts and disbursements of public funds by bank depositaries during the last twenty fiscal years have been as follows:

Fiscal year.	Receipts.	Funds transferred to depositary banks.	Funds transferred to the Treasury by depositary banks.	Drafts drawn on depositary banks.	Balance at close of the year.
1864	$153,395,108 71	$816,000 00	$85,507,674 08	$28,726,095 88	$39,976,738 75
1865	987,564,639 14	8,110,294 70	583,697,912 72	415,887,767 81	36,065,992 06
1866	497,566,676 42	13,523,972 62	363,085,565 65	149,772,756 11	34,298,319 34
1867	351,737,083 83	8,405,903 63	331,039,872 57	37,218,612 76	26,182,821 47
1868	225,244,144 75	9,404,392 00	215,311,460 69	22,218,187 92	23,301,709 61
1869	105,160,573 67	10,052,199 44	114,748,877 24	14,800,403 75	8,875,141 73
1870	120,984,041 79	2,466,521 06	111,123,926 18	11,818,228 61	8,483,549 79
1871	99,299,840 85	2,633,129 45	89,428,544 04	13,790,961 01	7,197,015 04
1872	106,104,855 16	3,050,444 05	94,938,603 76	13,635,837 49	7,777,873 00
1873	109,602,743 98	9,004,842 49	108,089,786 76	16,110,519 07	02,185,153 64
1874	91,108,846 70	2,729,958 81	134,869,112 57	13,364,554 52	7,790,292 06
1875	98,228,249 53	1,737,445 60	82,144,304 05	13,657,678 25	11,914,004 89
1876	97,402,227 57	2,445,451 49	89,981,146 99	13,909,616 83	7,870,920 13
1877	106,470,261 22	2,353,196 29	94,276,400 35	14,862,200 88	7,555,776 41
1878	99,781,053 48	2,385,920 38	90,177,963 35	12,606,870 60	6,937,916 32
1879	109,397,525 67	6,800,489 00	100,498,469 20	15,544,058 34	7,183,403 42
1880	119,493,171 94	6,489,634 17	109,641,232 64	15,525,023 03	7,999,953 86
1881	131,820,002 20	5,646,092 46	118,143,724 91	18,388,772 82	8,033,550 70
1882	143,261,541 41	5,256,574 29	129,131,305 07	18,709,928 56	9,610,432 86
1883	145,974,256 86	5,292,840 22	132,075,358 80	18,771,472 81	10,030,698 33
Total ...	3,958,696,844 88	108,695,302 21	3,177,951,241 71	879,410,207 05	.....

SPEAKER'S CERTIFICATES.

The recommendation made in former annual reports, that payment of compensation and mileage to members of the House of Representatives, now made by the Treasurer upon certificates of the Speaker (or Clerk of the House when there is no Speaker), be made by a disbursing officer to be designated and qualified for that purpose, is, for the same reasons, renewed. The Treasurer is now held responsible by the auditing officers for the correctness of accounts which he has no means of verifying, and the payments of which have been made by him under authority of law, which expressly states that the Speaker's certificates shall be conclusive upon all departments of the Government.

Such a change in the manner of payment must be authorized by a law creating a disbursing officer for that purpose or charging with that duty some officer at present qualified as a disbursing officer.

PACIFIC RAILROAD SINKING FUNDS.

United States bonds are now held by this office for account of the Pacific railroad sinking funds, established by the act of May 7, 1878 (20 Statutes, 56), as follows:

For the Union Pacific Railroad Company.

Bonds issued to Pacific Railways (currency sixes)	$361,000
Loan of July 12, 1882, 3 per cents	256,450
Funded loan of 1907, 4 per cents	32,650
	650,100

For the Central Pacific Railroad Company.

Bonds issued to Pacific Railways (currency sixes)	$444,000
Loan of July 12, 1882, 3 per cents	736,700
Funded loan of 1907, 4 per cents	199,100
	1,379,800

Bonds of the funded loan of 1881 continued at 3½ per cent. amounting to $541,800 were received for account of the Central Pacific Railroad Company, December 6, 1882, and exchanged into bonds of the loan of July 12, 1882, now held for the sinking fund of that company.

TRUST FUNDS.

The Indian trust fund.

The bonds and stocks of the Indian trust fund at the close of the fiscal year in the custody of this office under the act of Congress of June 10, 1876 (19 Statutes, 58), amounted to $1,808,016.83⅓. Of this amount $280,000 was in bonds issued to the Pacific railways (currency sixes), and the remainder in State and corporation stocks and bonds, as shown in the table in the appendix.

In pursuance of authority from the Secretary of the Treasury, on the request of the Secretary of the Interior, trustee of the Creek orphan fund, $70,800 bonds, described below, were transferred from the Indian trust fund January 10, 1883, to the Treasurer of the United States, custodian for the Secretary of the Treasury, the bonds having become the property of the United States under the act of Congress of August 7, 1882 (22 Statutes, 301):

Virginia, 6 per cent., registered	$41,800
Chesapeake and Ohio Canal, 6 per cent. coupon, guaranteed by State of Virginia	9,000
Tennessee, 5 per cent., registered	20,000
	70,800

In the action before the United States circuit court at Nashville, Tenn., to obtain payment of detached coupons from bonds of the Nashville and Chattanooga Railroad Company, amounting to $153,510, verdict was, by order of the court, rendered against the United States April 25, 1883, on the ground that the statute of limitations of the State of Tennessee barred the action. The case was taken by the United States district attorney, on a writ of error, to the Supreme Court of the United States, where it is now pending.

Interest is due and unpaid on all the bonds of the following-named States, held for account of these funds: Arkansas, Florida, Louisiana, North Carolina, South Carolina, Tennessee, and Virginia. Interest on the remaining bonds, those of the States of Indiana and Maryland, and bonds issued to the Pacific railways, is paid to date.

Miscellaneous trusts.

United States bonds are held in trust for the following:

American Printing House for the Blind	$250,000
Pennsylvania Company	200,000
Manhattan Savings Institution	200,000
Cincinnati Chamber of Commerce	40,000

The following-described bonds are held in custody of this office for the Secretary of the Treasury, all, with the exception of the Louisiana bonds, having become the property of the United States by payment of the amount of principal and interest to the trusts for which they were originally purchased:

Arkansas State bonds	$625,000
Chesapeake and Ohio Canal bonds	9,000
Louisiana State bonds	566,480
Virginia State bonds	41,800
North Carolina State bonds	41,800

Of the Arkansas bonds $538,000 belonged to the Smithsonian fund and $87,000 to the Indian trust fund. The Louisiana bonds, $566,480, were received from the Secretary of War, being a portion of the property captured at Baton Rouge, La.

UNITED STATES BONDS HELD FOR NATIONAL BANKS.

At the close of the fiscal year the United States bonds held in trust for the national banks amounted to $373,712,500. Of this amount, $356,596,500 was held to secure circulation and $17,116,000 to secure public moneys, as follows:

TO SECURE CIRCULATION.

Bonds issued to Pacific Railways, 6 per cents	$3,552,000
Funded loan of 1881, 5 per cents	15,000
Funded loan of 1891, 4½ per cents	39,408,500
Funded loan of 1907, 4 per cents	104,954,650
Bonds continued at 3½ per cent	7,788,500
Loan of July 12, 1882, 3 per cents	200,877,850
	356,596,500

TO SECURE PUBLIC MONEYS.

Bonds issued to Pacific Railways, 6 per cents	$20,000
Funded loan of 1891, 4½ per cents	1,060,500
Funded loan of 1907, 4 per cents	6,878,000
Bonds continued at 3½ per cent	351,500
Loan of July 12, 1882, 3 per cents	8,806,000
	17,116,000

The amount of bonds deposited during the year was $268,035,400, and of bonds withdrawn $270,970,600. The total movement of bonds held in trust for national banks was $539,006,000. Of the $304,204,350 3 per cent. bonds issued under the act of Congress of July 12, 1882, in exchange for United States bonds continued at 3½ per cent., $209,683,850, or more than two-thirds of the entire amount, were held in trust for national banks at the close of the year. The amount of bonds held to secure circulation on June 30, 1882, was $360,722,700, and the amount held June 30, 1883, was $356,596,500, showing a decrease during the year of $4,126,200.

A reference to the statements at different times for the past twelve years of the bonds held in trust for the national banks, shows that they have held a large amount of the bonded indebtedness of the Government which has been called in and paid during that period, and that

they have been compelled to make frequent withdrawals and changes of securities so held.

At the time the first call for five-twenty bonds was made in September, 1871, the banks had on deposit of the three classes of these bonds over $50,000,000, which, in due course, were withdrawn and replaced by other bonds, which also in turn were called and paid.

In May, 1877, the first call of the consols of 1865 was made, and these bonds, as well as the consols of 1867 and 1868 and the ten-forties of 1864, were all called within two years of that date. The banks had on deposit over $20,000,000 of consols in May, 1877, and over $57,000,000 of ten-forties when these were called, in April, 1879; for which $77,000,000 of other bonds were substituted.

In 1881, when the 5 per cent. bonds of the funded loan of 1881 and the 6 per cent. loans of 1861 and 1863 became payable there were held by the Treasurer for the banks over $210,000,000 of such bonds; a portion of the 5 per cents. was called, but on the greater part of these, and on all of the 6 per cents., the option was given to accept payment or have them continued at the rate of 3½ per cent., and most of the banks preferred the latter course.

As early as September, 1881, however, the calls for the redemption of the 3½ per cent. bonds began, and the banks were compelled to procure other bonds or retire such circulation as had been issued on the bonds called. Such of the 3½ per cent. bonds as had not been called on July 12, 1882, became, by the provisions of the act of that date, exchangeable into 3 per cents, and more than $209,000,000 taken by the banks were deposited with the Treasurer.

On September 19, 1883, the first call for 3 per cents was made, and, as further calls follow, the banks holding them will be required to retire the circulation issued thereon, or substitute bonds of other loans, all of which are at a high premium. This may result in a substantial reduction of bank circulation.

SEMI-ANNUAL DUTY FROM NATIONAL BANKS.

The act of March 3, 1883 (22 Statutes, chap. 121), having provided for the repeal of the taxes upon capital and deposits of national banks "except such taxes as are now due and payable," a question arose as to whether the taxes accruing since January 1, 1883, under former acts, but which were not, by such acts, made due and payable until the July succeeding, were remitted by the provisions of the later act. This question having been submitted by the Secretary of the Treasury to the Attorney-General for his opinion, the Department was advised by the latter officer that, since no taxes upon capital and deposits were *due and payable* under former laws until July 1, no part was due and payable at the date of the passage of the repealing act. The assessments for the period ending June 30, 1883, were made, accordingly, upon circulation only.

The amount collected for that period was		$1,564,521 59
The amount collected for the half year ending December 31, 1882, was—		
On circulation	$1,567,485 14	
On deposits	2,773,790 46	
On capital	269,976 43	
		4,611,252 03
Making the amount for the fiscal year		6,175,773 62

The total amount of duty collected by this office from the national banks since the organization of the system is, as shown in the appendix:

On circulation	$55,385,524 97
On deposits	60,940,067 16
On capital	7,855,887 74
Total	124,181,479 87

THE REDEMPTION OF NATIONAL-BANK NOTES.

Since the fiscal year 1881, when the amount of national-bank notes received for redemption touched the lowest point under the present system, there has been an increase each year in the amount received. In 1881 this amount was $59,650,259.43, increasing to $76,089,327.48 in 1882, and to $102,699,676.73 in the last fiscal year. The increase in the receipts during the last fiscal year over the fiscal year 1882 was $34\frac{97}{100}$ per cent., and for 1882 over 1881, $27\frac{55}{100}$ per cent. The percentage of increase in the receipts for the current fiscal year over the last year, for the four months ending October 31, is $28\frac{65}{100}$ per cent., and, if maintained throughout the year, will make the receipts for the current year about $132,000,000. The aggregate amount of bank notes received for redemption from the passage of the redemption act of 1874 to June 30, last, was $1,278,278,153.40. The largest amount received in any one fiscal year was $236,210,375.14, in 1877.

Notwithstanding the steady increase since 1881 in the amount of bank notes presented for redemption, the number of persons employed and the appropriations for salaries have remained substantially the same since that year. The accomplishment of the work so increased without increase in the number of persons employed is due, in a measure, to the greater efficiency of the employés, gained by their long and continuous service, and to the changes made from time to time in the methods of doing the work. The fifty-seven persons now employed are taxed to their full capacity to perform the amount of work required of them, and at the present rate of increase in the redemptions the services of at least ten more persons will be necessaryfor the fiscal year 1885, and an increase of that number has been asked for in the estimates submitted for the service of that year. It has always been the endeavor to keep the expenses for redeeming the national-bank currency, which are borne by the national banks, at the lowest possible amount, having due regard to the proper and safe performance of the work, which is attended with much risk and labor—risk on account of the large sums handled, and labor on account of the number of banks (now 3,060) for which the notes have to be assorted. This endeavor will be continued, and no request will be made for the appointment of any of the ten additional persons asked for unless the increase in the receipts shall continue and their services be absolutely required.

The amount of national-bank notes assorted during the fiscal year was $98,904,518; of which $15,572,100 were fit for circulation, and were charged to the 5 per cent. account and forwarded by express to the banks by which they had been issued; $78,664,758 were delivered to the Comptroller of the Currency, and $4,667,660 were notes of failed national banks and of banks which had gone into voluntary liquidation and made deposits for the redemption of their circulation prior to July 12, 1882, and the notes of national banks reducing their circulation under the act of 1874, redeemed from July 1 to July 12, 1882. Of the amount delivered to the Comptroller of the Currency, $59,875,000 were charged to the 5 per cent. account; $1,146,889 to the liquidating account against deposits made subsequent to July 12, 1882, and $17,642,869 to the reducing account.

The expenses incurred during the year and paid out of the 5 per cent. fund were $57,190.86 for express charges; $86,213.35 for salaries; $2,401.54 for printing and binding; $890.41 for stationery, and $896.11 for other necessary incidental expenses; making, in all, $147,592.27, which, when assessed upon $94,832,867.50, the amount of notes assorted during the year and subject to assessment, gives a rate of 1.55\frac{234}{1000}$ per $1,000 assorted. This is the lowest rate of assessment that has yet been made. In the aggregate, the expenses for the last fiscal year exceed by $18,063.89 those for the fiscal year 1882, while a reduction of 24$\frac{782}{1000}$ cents per $1,000 assorted has been made in the rate of the assessment for the last fiscal year compared with that for the year 1882, which was 1.80\frac{116}{1000}$. This reduction is due to the increase from $74,593,730 in 1882 to $98,904,518 in the last fiscal year in the amount of notes assorted without a corresponding increase in the expenses. Of the increase of $18,063.89 in the expenses, $17,987.55 is due to an increase in the item of express charges caused by the transporting of a larger amount of notes. The other items of expenses remain about the same as for the fiscal year 1882.

The provisions of the act of July 12, 1882, requiring national banks making deposits for the retirement in full of their circulation, to be assessed at the time of such deposits for the redemption of their notes then outstanding, a sum equal to the average cost of the redemption of national bank notes during the preceding year, became operative in the last fiscal year. The amount of such assessments made during the fiscal year and carried to the credit of an account designated "Assessments for Retirement of Circulation" is $12,979.34, against which amount will be charged $3,220.46 for the cost of transporting and redeeming the notes of such banks during the fiscal year.

The present regulations in regard to express charges and the modes of making returns, which have now been uninterruptedly in force for the last two fiscal years, are believed to give general satisfaction by affording ample facilities for the redemption of national-bank notes with the most equitable division of the expense between the holders of the notes and the issuers.

The only express charges incurred in the redemption of bank notes included in the assessment on national banks are the charges for the transportation to Washington of the notes forwarded in sums or multiples of $1,000, and of the assorted notes, fit for circulation, forwarded from Washington to the respective banks of issue.

By this manner of paying these charges, holders of bank notes are placed on an equality without regard to their distance from the redemption agent, and the redeeming banks are also so placed with regard to each other. This cost for the last year was at the average rate of 48$\frac{35}{100}$ cents per $1,000 transported.

National-bank notes redeemed are paid for by transfer checks on the various assistant treasurers unless other returns are requested. The use of checks is, not to furnish exchange, but to make available in the redemption of bank notes the lawful money deposited with assistant treasurers by national banks for their redemption accounts, and at the same time to accomplish the redemption of the notes with the least expense for transportation. In order that notes may not be forwarded for redemption for the sole purpose of making exchange, all remittances of bank notes for redemption from cities in which there is an assistant treasurer are paid for by checks on the assistant treasurer in the city from which the remittance is received, unless lawful money is desired by express. The amount of bank notes received during the fiscal year

from such cities was $71,103,000, being $69\frac{22}{100}$ per cent. of the whole amount received. The deposits of lawful money made during the fiscal year by national banks with the assistant treasurers for their redemption accounts aggregated $83,607,315.40, while the checks drawn for bank notes redeemed amounted to only $56,018,447.71. In paying by checks for remittances of bank notes from points where there is no assistant treasurer, the checks are drawn upon the office where funds are available for that purpose, having as great regard as may be possible to the accommodation of the parties sending the notes for redemption.

DEPOSITS FOR RETIREMENT OF BANK CIRCULATION.

The deposits made by national banks for the retirement of their circulation from July 12, 1882, to June 30, last, amounted to $21,415,993. Of these deposits $15,546,098 were made under the acts of June 20, 1874, and July 12, 1882, for the reduction of circulation, and $5,869,895 under section 5222 of the Revised Statutes, for the retirement in full of circulation of national banks in voluntary liquidation. Of the $15,546,098 deposited under the acts of 1874 and 1882, $9,411,938 was lawful money, and $6,134,160 proceeds of "called" bonds. The limit to lawful-money deposits under these acts of $3,000,900 during any calendar month was not reached, the largest amount deposited in any month being $1,455,900, in February, 1883.

COUNT OF FUNDS.

On the 31st of March last, on the transfer of the office from the late Treasurer to the present incumbent, a count of the moneys and securities was commenced, and was completed on the 19th of April. The count was thorough and accurate, the result showing a difference between the amount actually on hand and the amount required to balance the accounts of a few cents only, which result may be accepted by the late Treasurer and his assistants in the office as high commendation of the management.

A transfer of this office from a retiring Treasurer to his successor does not necessarily include an examination of the moneys in the offices of the assistant treasurers and of other depositaries, although the Treasurer is charged on the books of the Department with all such moneys, and the accounting is with him; but the several officers are held responsible for the funds in their hands, which are included in the Treasurer's balance.

RESTORATION OF SALARIES.

The salaries of a number of the principal officers of the Treasurer's office, fixed by the law reorganizing the Treasury Department (18 Statutes, 377), were reduced by an appropriation act in 1876. It will not be contended by any one familiar with the duties attached to those positions, that there was justice in these reductions, or any necessity arising from the needs of the Government, that these small amounts should be taken from the compensation of faithful officers. The Treasurer continues the recommendation of his predecessor, annually submitted, that the salaries be restored, including that portion deducted from the Treasurer's salary, previously and for many years standing at the higher rate. He desires to bear testimony in favor of those connected with him in the administration of his office, many of them long in the service, whose intelligent and faithful efforts in the discharge of important and responsible duties deserve commendation.

The Treasurer would be glad of the opportunity, if it could be afforded him by an authorized addition to the number of officers above the grade

of fourth-class clerks, to recommend the advancement to the higher grades of some of the most deserving of those now receiving salaries which are not adequate compensation for the duties they perform.

Very respectfully, your obedient servant,

A. U. WYMAN,
Treasurer of the United States.

Hon. CHARLES J. FOLGER,
Secretary of the Treasury.

REPORT OF THE REGISTER OF THE TREASURY.

TREASURY DEPARTMENT,
REGISTER'S OFFICE,
November 1, 1883.

SIR: I have the honor to transmit herewith a report of the work performed in this office during the fiscal year ended June 30, 1883.

The cessation of refunding operations will enable me to reduce slightly the force in the loan division, but all clerks relieved from duty there will be needed in other divisions of the office, in one of which, the note and coupon division, the work has fallen considerably in arrears, in consequence of the detail of its clerks to other divisions.

The room in which this division is located should be enlarged by the addition of the small room at the south end thereof.

I have to call attention to the necessity for additional rooms for the files of this office. The accumulation of files is large and rapid, while but little additional space has been given during the past ten years.

The need is now pressing, and unless more room is speedily given or authority for the destruction of useless papers obtained, no suitable arrangement of the files will be possible, but they must be piled upon the floors, which is very undesirable and inconvenient, and even that could not be long continued.

My views on this subject, and those of my predecessors, have been communicated to the honorable Secretary of the Treasury in letters dated February 23, 1881, March 3, 1882, and September 29, 1882, to the effect that temporary relief could be obtained by the destruction of papers, under the authority of Congress, but that a large addition of fire-proof files rooms is imperatively required for the proper arrangement and preservation of the files.

Additional space is required also for the proper performance of the business of the tonnage division of this office.

I am pleased to be able to testify to the efficiency and good conduct of the employés of the Bureau.

LOAN DIVISION.

Total number of coupon and registered bonds issued	126,920
Total number of coupon and registered bonds canceled	182,081

AMOUNT ISSUED.

Direct issue (coupon)	$78,550 00
Direct issue (registered)	304,327,500 00
Registered bonds issued in exchange for coupon bonds	25,301,500 00
Registered bonds issued upon transfers, including Spanish indemnity	201,834,657 88
	531,542,207.88

AMOUNT CANCELED.

Actual redemptions (coupon and registered)	$453,030,450 00
Coupon bonds converted into registered	25,301,500 00
Registered bonds transferred	201,834,657 88
	680,166,607 88

A synopsis of the vault account shows that the amount of blank bonds of the different loans on hand July 1, 1882, was—

Coupon bonds	$31,462,400 00
Registered bonds	920,296,950 00
District of Columbia bonds	3,107,750 00
Received during the year:	
From the Secretary of the Treasury	574,408,500 00
From the Commissioners of District of Columbia	4,446,250 00
	1,533,721,850 00

Accounted for as follows:	
United States coupon bonds issued	$45,450 00
United States registered bonds issued, exclusive of Spanish indemnity	527,686,450 00
District of Columbia coupon bonds issued	33,200 00
District of Columbia registered bonds issued	3,747,000 00
Delivered to destruction committee:	
United States coupon bonds	30,300,000 00
United States registered bonds	70,338,150 00
On hand June 30, 1883:	
United States coupon bonds	1,116,950 00
United States registered bonds	896,680,850 00
District of Columbia bonds	3,773,800 00
	1,533,721,850 00

Amount of canceled coupon bonds delivered to note and coupon division	$50,622,800 00

The issues show an increase of 22,574 bonds and $52,715,057 in amount over that of the previous year.

Of the total amount issued, about three hundred millions represent the 3 per cents issued in exchange for the 3½ per cents.

The dividends of interest declared on the different loans during the year have called for 293,378 Treasury checks in payment.

There have been received and answered 17,361 letters; 3,836 were forwarded from the office by registered mail.

There is included in the blank bonds "on hand June 30, 1883," as per vault account, one registered 4 per cent. bond, No. 27,039, for $5,000, which number when reached in the regular order of issue was found to be missing. The matter was duly reported to you under date of August 23, and although a searching investigation was made by the Secret Service Division, earnestly seconded by this office, I regret to state that no clew to its mysterious disappearance has been discovered. This bond, however, could not be negotiated, being an unfilled blank, lacking name of payee, date of issue, initials of the clerks who enter and record the issue, seal of the Treasury Department, and the signature of the Register. It is, in fact, only the printed form of a bond, and it is impossible that the Government should lose by its abstraction. This immediate detection of the loss of a single bond, among the hundreds of thousands issued by the Government, clearly demonstrates the accuracy and care with which the records of this office are kept.

STATEMENT showing the NUMBER and AMOUNT of COUPON and REGISTERED BONDS ISSUED during the fiscal year ended June 30, 1883.

Loans.		Bonds issued.				
		Direct issue, amount.	Exchanges, amount.	Transfers, amount.	Total bonds issued.	Total amount issued.
3 percents of 1882	R..	$304,252,000	.....	$45,302,100 00	83,173	$349,554,100 00
4 per cent. consols, 1907	C..	45,350	.....	.....	268	45,350 00
	R..	75,500	$18,016,200	88,908,750 00	27,351	107,000,450 00
4½ per cent. funded, 1891	R..	.....	6,697,300	36,176,350 00	10,574	42,873,650 00
Pacific railroads	R..	.....	.....	5,336,000 00	1,007	5,336,000 00
1863, funded into 3½'s	R..	.....	.....	5,130,800 00	790	5,130,800 00
5 per cent. funded into 3½'s	R..	.....	.....	17,791,550 00	2,521	17,791,550 00
3.65 per cent. funded, District of Columbia	C..	33,200	.....	.....	133	33,200 00
	R..	.....	513,000	3,155,000 00	1,012	3,668,000 00
5 per cent. funded, District of Columbia	R..	.....	75,000	4,000 00	79	79,000 00
Spanish indemnity	.....	.....	.....	30,107 88	12	30,107 88
Total	.....	304,406,050	25,301,500	201,834,657 88	126,920	531,542,207 88

STATEMENT showing the NUMBER and AMOUNT of COUPON and REGISTERED BONDS CANCELED during the fiscal year ended June 30, 1883.

Loans.		Bonds canceled.				
		Redemptions, amount.	Exchanges, amount.	Transfers, amount.	Total number of bonds.	Total amount canceled.
3 percents of 1882	R..	$47,650	.....	$45,302,100 00	19,441	$45,349,750 00
4 per cent. consols of 1907	C..	.....	$18,016,200	.....	.....	18,016,200 00
	R..	1,418,850	.....	88,908,750 00	70,442	90,327,600 00
4½ per cent. funded of 1891	C..	.....	6,697,300	.....	.....	6,697,300 00
	R..	.....	.....	36,176,350 00	17,413	36,176,350 00
Pacific railroads	R..	.....	.....	5,336,000 00	1,014	5,336,000 00
July and August, 1861, 3½ per cent.	R..	33,265,350	.....	.....	10,003	33,265,350 00
March 3, 1863, 3½ per cent	R..	47,241,700	.....	5,130,800 00	11,794	52,372,500 00
5 per cent. funded, 3½ per cent.	R..	366,420,000	.....	17,791,550 00	43,820	384,211,550 00
5 per cent. funded, District of Columbia	C..	34,800	75,000	.....	.....	109,800 00
	R..	.....	.....	4,000 00	121	4,000 00
3.65 per cent. funded, District of Columbia	C..	34,100	513,000	.....	.....	547,100 00
	R..	.....	.....	3,155,000 00	2,825	3,155,000 00
Spanish indemnity	.....	.....	.....	30,107 88	8	30,107 88
1861—February 8, 6 per cent.	C..	22,000	.....	.....	.....	22,000 00
	R..	6,000	.....	.....	28	6,000 00
1861—July and August, 6 per cent	C..	275,050	.....	.....	.....	275,050 00
	R..	991,200	.....	.....	1,345	991,200 00
1863—March 3, 6 per cent.	C..	107,300	.....	.....	.....	107,300 00
	R..	59,400	.....	.....	225	59,400 00
1881—Funded, 5 per cent	C..	998,700	.....	.....	.....	998,700 00
	R..	1,279,600	.....	.....	2,475	1,279,600 00
1862—February 25, 6 per cent.	C..	10,800	.....	.....	.....	10,800 00
	R..	50	.....	.....	48	50 00
1864—June 30, 6 per cent	C..	8,250	.....	.....	11	8,250 00
	R..	.....	.....	.....	.....	.....
1864—10-40's, 5 per cent	C..	114,600	.....	.....	.....	114,600 00
	R..	91,500	.....	.....	272	91,500 00
1865—March 3, 6 per cent.	C..	13,000	.....	.....	23	13,000 00
	R..	.....	.....	.....	.....	.....
1865—Consols, 6 per cent	C..	49,400	.....	.....	.....	49,400 00
	R..	10,100	.....	.....	136	10,100 00
1867—Consols, 6 per cent	C..	268,900	.....	.....	.....	268,900 00
	R..	67,300	.....	.....	679	67,300 00
1868—Consols, 6 per cent	C..	54,100	.....	.....	.....	54,100 00
	R..	18,000	.....	.....	159	18,000 00
Loan of 1858	C..	1,000	.....	.....	1	1,000 00
War bounty scrip	R..	100	.....	.....	1	100 00
Oregon war debt	C..	121,650	.....	.....	297	121,650 00
Total	.....	453,030,450	25,301,500	201,834,657 88	182,081	680,166,607 88

NOTE AND COUPON DIVISION.

STATEMENT of TREASURY NOTES, INTEREST CHECKS, and CERTIFICATES, COUNTED, ARRANGED, REGISTERED, and EXAMINED.

ONE and TWO YEARS' 5 PER CENT. TREASURY NOTES.

Authorizing act.	Number of notes.	Amount.
March 3, 1863	130	$5,210 00

THREE YEARS' 6 PER CENT. COMPOUND-INTEREST NOTES.

Authorizing acts.	Number of notes.	Amount.
March 3, 1863, and June 30, 1864	417	$8,790 00

THREE YEARS' 7⅓ PER CENT. TREASURY NOTES.

Authorizing acts.	Number of notes.	Amount.
July 17, 1861	1	$50 00
June 30, 1864, and March 3, 1865	20	1,300 00
	21	1,350 00

GOLD CERTIFICATES.

Authorizing act.	Number of certificates.	Amount.
March 3, 1863	1,834	$1,546,180 00

CURRENCY CERTIFICATES of DEPOSIT.

Authorizing act.	Number of certificates.	Amount.
June 8, 1872	2,700	$23,205,000 00

INTEREST CHECKS.

Authorizing acts.	Number of checks.	Amount.
July 17 and August 5, 1861 (6 per cent.):		
Final dividend	6,083	$3,824,920 50
Continued at 3½ per cent	6,147	1,779,050 12
March 3, 1863 (6 per cent.):		
Final dividend	3,090	1,509,996 00
Continued at 3½ per cent	3,542	838,956 09
Funded loan of 1881 (5 per cent.)	10,000	4,281,963 59
Funded loan of 1881 (final dividend)	8,248	5,620,605 75
Funded loan of 1891 (4½ per cent.)	57,626	10,065,793 68
Consols of 1907 (4 per cent.)	207,856	20,215,177 02
District of Columbia (funded)	2,506	904,999 25
Pacific railroads	2,923	3,972,640 72
Total	308,021	53,014,002 72

REDEEMED COUPONS DETACHED from BONDS and NOTES.

Arranged numerically	2,894,383
Registered	2,515,296
Examined	2,444,608

REDEEMED, EXCHANGED, and TRANSFERRED UNITED STATES BONDS, with COUPONS attached, EXAMINED, REGISTERED, and SCHEDULED.

Loan.	Number of bonds.	Amount of bonds.	Number of coupons attached.
Consols of 1865	56,807	$31,887,600	729,790

NOTE AND FRACTIONAL-CURRENCY DIVISION.

STATEMENT SHOWING the NUMBER of NOTES and AMOUNT of UNITED STATES NOTES, DEMAND NOTES, 4 PER CENT. REFUNDING CERTIFICATES, SILVER CERTIFICATES, GOLD-COIN CERTIFICATES, and FRACTIONAL CURRENCY EXAMINED, COUNTED, and DESTROYED for the fiscal year ending June 30, 1883.

United States notes.	Number of notes.	Amount.
New issue	113,028	$1,104,150
Series 1869	1,180,863	12,582,500
Series 1874	170,055	2,731,250
Series 1875	2,940,178	16,007,400
Series 1878	4,567,084	54,317,500
Series 1880	11,017,977	19,478,200
4 per cent. refunding certificates	6,685	66,850
Demand notes	79	640
Silver certificates:		
series 1878, issued at Washington	73,991	3,220,200
series 1880, issued at Washington	475,760	6,378,700
series 1878, issued at New York	17,733	556,550
series 1880, issued at New York	71,650	899,000
series 1878, issued at San Francisco	3,861	1,792,150
Gold-coin certificates, 1882:		
issued at Washington	1,458	45,220
issued at New York	11,419	7,742,080
Fractional currency:		
first issue	1,400	220
second issue	1,400	175
third issue	6,500	1,377
fourth issue	21,200	3,550
fourth issue, second series	3,200	1,000
fourth issue, third series	3,900	1,950
fifth issue	122,700	20,180
	20,812,121	127,018,022

2,963,115 excess over the year 1882, $39,458,240.

TONNAGE DIVISION.

The total tonnage of the country exhibits an increase of 69,554.01 tons, the registered tonnage having increased 9,800.15 tons, the enrolled 51,349.78 tons, and the licensed, under 20 tons, 8,404.08 tons.

Below are given the totals for the last two years:

	1882.		1883.	
	Vessels.	Tons.	Vessels.	Tons.
Registered	2,185	1,292,294.50	2,174	1,302,094.65
Enrolled and licensed	22,183	2,873,638.74	22,043	2,933,392.60
Total	24,368	4,165,933.24	24,217	4,235,487.25

The comparison of the different classes of vessels is as follows:

	1882.		1883.	
	Vessels.	Tons.	Vessels.	Tons.
Sailing vessels	16,819	2,361,251.27	16,697	2,386,556.77
Steam vessels	5,191	1,355,825.65	5,249	1,413,193.73
Canal boats	1,138	107,394.00	1,186	118,186.35
Barges	1,220	341,462.32	1,085	317,550.40
Total	24,368	4,165,933.24	24,217	4,235,487.25

It may be seen from the foregoing that the sailing tonnage has increased 25,305.50 tons, the steam tonnage 57,368.08 tons, and the canal-boat tonnage 10,792.35 tons, while the barge tonnage has decreased 23,911.92 tons.

The proportion of the sailing tonnage registered is 47 per centum, and the steam tonnage registered 12 per centum.

SHIP-BUILDING.

The following table exhibits the class, number, and tonnage of the vessels built during the last two years:

Class.	1882.		1883.	
	Vessels.	Tons.	Vessels.	Tons.
Sailing vessels	666	118,798.50	721	137,046.17
Steam vessels	502	121,842.66	439	107,229.78
Canal boats	68	7,882.06	42	4,710.91
Barges	135	33,746.51	66	16,443.05
Total	1,371	282,269.73	1,268	265,429.91

From the foregoing it appears that the amount built during the past year was less by 16,839.82 tons than that of the preceding year.

The tonnage built during the last two years in the several grand divisions of the country is shown below:

Division.	1882.		1883.	
	Vessels.	Tons.	Vessels.	Tons.
Atlantic and Gulf coasts	890	172,306.89	881	193,610.60
Pacific coast	75	15,776.95	91	16,737.97
Northern lakes	254	58,368.94	171	28,638.42
Western rivers	152	35,816.95	125	26,442.92
Total	1,371	282,269.73	1,268	265,429.91

The following table exhibits the iron tonnage built in the country since 1867:

Class.	1868.	1869.	1870.	1871.	1872.	1873.	1874.	1875.
Sailing vessels		1,039	679	2,067				
Steam vessels	2,801	3,545	7,602	13,412	12,766	26,548	33,097	21,632
Total	2,801	4,584	8,281	15,479	12,766	26,548	33,097	21,632

Class.	1876.	1877.	1878.	1879.	1880.	1881.	1882.	1883.
Sailing vessels	.....	.....	.....	.....	44	36	.....	2,033
Steam vessels	21,346	5,927	26,960	22,008	25,538	28,320	40,097	37,613
Total	21,346	5,927	26,960	22,008	25,582	28,356	40,097	39,646

Table showing the amount of iron tonnage outstanding may be found in the Report on Commerce and Navigation.

THE FISHERIES.

The tonnage engaged in the fisheries during the last two years is as follows:

Fisheries.	1882.		1883.	
	Vessels.	Tons.	Vessels.	Tons.
Cod and mackerel	2,090	77,862.46	2,249	95,038.22
Whale	146	32,802.22	141	32,414.05

Below is shown the amount of tonnage employed in the cod and mackerel fisheries, with the per centum of each State:

States.	Tonnage.	Per cent.
Maine	34,174.11	36
New Hampshire	5,832.45	6.1
Massachusetts	45,067.16	47.4
Rhode Island	1,787.70	1.85
Connecticut	3,053.34	3.2
New York	2,431.06	2.5
New Jersey	76.66	0.1
Maryland	1,222.00	1.3
Virginia	531.37	0.6
North Carolina	95.44	0.1
Florida	535.61	0.6
Alabama	137.32	0.15
California	94.00	0.1
Total	95,038.22	100

This shows an increase of about 22 per cent. during the year. The tonnage employed in the whale fisheries is given below:

Customs districts.	1882.		1883.	
	Vessels.	Tons.	Vessels.	Tons.
Boston, Mass	5	794.87	5	794.87
Barnstable, Mass	11	1,052.81	12	1,120.63
Edgartown, Mass	5	891.28	5	891.28
New Bedford, Mass. (sail)	117	28,876.66	110	27,602.44
New Bedford, Mass. (steam)	.....	.....	3	1,298.29
New London, Conn	8	1,186.60	6	700.44
Total	146	32,802.22	141	32,414.05

Of the above 89 per cent. belongs to New Bedford. Fuller tables, showing the various classes of tonnage, may be found in the appendix to this report.

DIVISION OF RECEIPTS AND EXPENDITURES.

The following statement exhibits the work of this division for the year ended June 30, 1883:

The number of warrants registered during the year for civil, diplomatic, miscellaneous, internal revenue, and public debt expenditures and repayments was	26,887
The number of warrants registered for receipts from customs, lands, internal revenue, direct tax, and miscellaneous sources was	14,942
The number of warrants registered for payments and repayments in the War, Navy, and Interior (pension and Indian) Departments was	18,804
The number of drafts was	47,809
The number of journal pages required for the entry of accounts relating to the civil, diplomatic, internal revenue, miscellaneous, and public debt receipts and expenditures was	6,418
The number of certificates furnished for statements of accounts was	14,960
The number of accounts received from the First and Fifth Auditors and Commissioner of the General Land Office was	24,688

In the appendix will be found a statement of the receipts and expenditures of the Government, as required by the standing order of the House of Representatives of December 30, 1791, and section 237 of the Revised Statutes; also, statements of the money expended and the number of persons employed and the occupation and salary of each person at each custom-house, as required by section 258 of the Revised Statutes.

Very respectfully, your obedient servant,

B. K. BRUCE,
Register.

Hon. CHARLES J. FOLGER,
Secretary of the Treasury.

* * * * * * *

REPORT

OF

THE SECRETARY OF WAR.

WAR DEPARTMENT,
November 15, 1883.

To the PRESIDENT:

I have the honor to submit the following annual report of the administration of this Department:

EXPENDITURES, APPROPRIATIONS, AND ESTIMATES.

The expenditures by requisition under the direction of the War Department during the fiscal year ending June 30, 1883, were as follows:

Salaries, contingent expenses, and postage	$2,146,005 10
Military Establishment—Army and Military Academy	27,830,976 15
Public works, including river and harbor improvements	15,659,337 31
Miscellaneous objects	4,154,736 86
Total	49,791,055 42

and the sum of $1,663,151.30 was credited under the act of March 3, 1879 (20 Statutes, 420), to the subsidized Pacific railroads, for transportation services rendered the War Department during the fiscal year 1883, and prior years.

The appropriations for the fiscal year 1884 are as follows:

Salaries, contingent expenses, and postage	$2,248,121 66
Military Establishment—Army and Military Academy	24,951,557 50
Public works	1,925,344 80
Miscellaneous objects, including Signal Service	2,641,928 07
Total	31,766,952 03

The estimates for the fiscal year ending June 30, 1885, as revised by me, are as follows:

Salaries, contingent expenses, and postage, including one-third of the estimate of the superintendent of the State, War, and Navy Department Building	$2,322,078 33
Military Establishment—Army and Military Academy	27,136,152 41
Public works, including river and harbor improvements	11,649,049 62
Miscellaneous objects, including Signal Service	3,278,926 42
Total	44,386,206 78

The principal items of increase of the estimates for salaries over the appropriations for the present fiscal year are for two clerks and three laborers in the office of the Secretary, fifty additional clerks in the Signal Office, four clerks in the Ordnance Office, and two clerks in the Bureau of Military Justice. An increase of compensation is again recommended for the chief clerk, disbursing clerk, chiefs of divisions, and stenographer in the office of the Secretary, and it is thought eminently just that these officers should receive the moderate compensation requested for the responsible and arduous duties performed by them. The two additional clerks and three laborers for the office of the Secretary of War are required for the stationary division, the division of miscellaneous supplies, and the library. A large reduction has been made in purchasing the stationery and supplies required for this office and the bureaus of the Department by making contracts with the lowest bidder upon each article. The labor necessarily involved under this system in receiving, accounting for, and delivering the supplies is great, and the Department has been inconvenienced in providing for the prompt transaction of the business. The distribution of the official records of the rebellion, devolved upon the Secretary's office by the act of August 7, 1882 (22 Statutes, 320), has also greatly increased the labor of the office, particularly of the librarian, who has been charged with the work, and an additional laborer is required therefor. During the past year he has received 176,000 volumes of these records, and has mailed to separate addresses over 30,000 volumes, keeping a record of each volume so sent.

The estimates for the support of the Army and Military Academy are based upon the actual requirements of the service, the several items of increase being explained by notes accompanying them.

The appropriations for the support of the Signal Service for the fiscal year ending June 30, 1883, have been found insufficient, and estimates will be submitted to supply the deficiencies. Some difficulty was experienced in carrying out the provisions of the act of August 7, 1882 (22 Statutes, 319), which limited the expenditures to $300,000 from appropriations for support of the Army, in addition to the specific appropriations for that service. Thirty-eight days of the fiscal year had already expired, and, although the best efforts of the Department were exercised to keep the expenditures within the limit of the appropriations, its endeavors were not completely successful.

THE ARMY.

The report of the General of the Army has a special interest in being the last annual report that General Sherman will make. At his own request he has been relieved from the command of the Army, preparatory to his retirement from active service under the act of 1882. He has therefore thought it best to refrain from making any new

recommendations in his report, leaving that duty to his successor in the command of the Army, Lieutenant-General Sheridan. He, however, calls attention to and renews a former recommendation that a new organization be adopted for the regiments of infantry so that each shall be composed of twelve companies, making three battalions of four companies each, each company having one hundred men; and that in time of peace two of these battalions shall be maintained on a perfect war footing, while the other battalion may be a mere skeleton, with its complement of officers, and be used as a nucleus for recruits. The great advantage of this change, as suggested by the General, is the important one of being able to put a large and effective force in the field upon short notice, by merely enlisting a sufficient number of additional private soldiers, the officers and organization being always ready to receive them.

During the past year an additional company in each of the regiments of artillery has been mounted and equipped as a light battery, so that there are now in service ten light batteries, stationed in different parts of the United States.

The history of the Army during the past year has been one of almost unbroken quiet, during which the troops have been engaged in no more active duties than those of guarding the Indian reservations, and in keeping themselves prepared for any service upon which they might be called. The only exception to this record occurred in Arizona. In March last a small party of Indians made a raid from Mexico, and, after killing nine persons, escaped back to the difficult country from which they had come. Brigadier General Crook made a vigorous pursuit, going many miles into Mexico, and, after pentrating into an almost inaccessible part of the Sierra Madre Mountains, had a fight with the Indians, and returned with a large number of prisoners, among whom were fifty-two male Indians. As for some time past the only Indian outbreaks have been in Arizona, special attention has been directed to an endeavor to secure for that region of the country the same quiet which exists elsewhere. After careful consideration of the difficulties involved, an arrangement has been made between the Interior Department and the War Department, under which the police control of all the Indians on the San Carlos Reservation has been given to General Crook, and he has been charged with the duty of keeping the peace on the reservation and preventing the Indians from leaving it. General Sherman expresses the belief that if General Crook is permitted to manage the Apaches in his own way, all wars will cease in Arizona, and that with them will disappear the complicated Indian question which has tested the patience and courage of our people ever since the first settlement by whites on this continent.

The schools for officers (one at Fortress Monroe for higher instruction in artillery, and one at Fort Leavenworth for more perfect instruction in matters relating to the cavalry and infantry arms of the service)

are reported by the General as being in excellent condition, and as well managed and fulfilling their purpose; and I concur with him in recommending for them support and encouragement.

The number of desertions from the Army in the past year was nearly 3,600; only a few less than the extraordinary number of the year before. The most earnest efforts are being made to ascertain, and, so far as possible, do away with the causes of desertion. I beg leave to renew the recommendation made last year, that a partial remedy may be found by increasing the pay to what it was in 1865, that is, $16 per month for a private soldier and a proportionate amount for non-commissioned officers.

MILITARY ACADEMY.

The Superintendent reports that the general tone and discipline of the Corps of Cadets are very good. The total number of cadets present September 1 last was 311.

ADJUTANT-GENERAL'S DEPARTMENT.

The full list of officers authorized by law to act as instructors in tactics and military science at colleges throughout the country has been so employed during the past year. The reports show a continuing interest taken by the college authorities and students in this work.

The Adjutant-General recommends that Congress be asked to authorize the retirement of enlisted men who have served faithfully for not less than thirty-five years with full pay of the grade held by them at the time of their retirement. It is true that the Soldiers' Home near Washington makes provision for most of the cases, but there are others for whom it cannot properly provide. The Adjutant-General, in his report, mentions particularly two cases of old soldiers of forty years' service who are incapacitated for further duty, but who cannot avail themselves of the benefits of the shelter of the Soldiers' Home without leaving their wives and children. I concur in his recommendation that some proper provision be made for such cases.

I beg leave to renew my recommendation, made last year, that the laws should be amended so as to permit officers at remote posts to employ enlisted men, upon the approval of the proper department commander, for domestic purposes, where servants cannot be obtained.

I also renew my recommendation that there be restored the *per diem* allowance to officers serving away from their stations on courts-martial and military boards. Not infrequently an officer is required to perform such duty under circumstances of considerable hardship in the extraordinary expenses incurred by him.

The Adjutant-General recommends that the law in relation to the settlement by enlisted men of their clothing account be so amended as

to require a bimonthly settlement. The reasons given by him for this suggestion in his report show clearly that such a change would be greatly in the interest of economy to the Government, and would at the same time be beneficial to the soldier.

The important records of the Adjutant-General, occupying no less than six rented buildings, have since the last annual report been transferred to the new State, War, and Navy Department Building, where they are now safe from destruction by fire.

A gratifying progress in responding to requests for information in pension and other claims is reported.

The number of unanswered calls on hand October 1, 1882, was	45,822
There were received during the year thereafter	231,360
Finished during the year	255,923
Remaining on hand October 1, 1883	21,259

THE SOLDIERS' HOME.

The Board of three Commissioners was increased by act of Congress approved March 3, 1883, to seven, including the General commanding the Army, who is the president of the Board. The same act prescribed new regulations for the Home, the most important being those affecting the management and control of the funds and the pensions of inmates. These regulations appear to be satisfactory, and have been strictly observed.

No additions have been made to the realty of the Home and no important improvements made during the year, except the completion of a library building and rebuilding a barn destroyed by fire early in July. The expense upon both buildings will be about $5,900.

The property of the Home at Harrodsburg, Ky., was offered for sale in April, under authority of an act of Congress approved December 23, 1882, but a sufficient bid could not be obtained.

The Commissioners renew a former request that a small piece of land in the District of Columbia belonging to the Home, and now used for the purposes of a national cemetery, may be purchased by the General Government for the same purpose permanently. An appropriation of $15,000, to be paid in to the Home fund as the price of the ground, is recommended.

The expense for care and treatment of inmates who become insane is paid by the Home to the Government Hospital for the Insane. The Commissioners ask for the Soldiers' Home in the District of Columbia the same privilege of sending insane patients to the Hospital as was granted by act approved August 7, 1882, for the National Home for Volunteers. Appropriate legislation for this purpose is recommended.

The total receipts by the treasurer of the Home during the year were $143,035.50, and the cost of maintaining the Home $139,557.63.

GOVERNMENT HOSPITAL FOR THE INSANE.

The following is a statement of the number of persons committed to the Government Hospital for the Insane, under the orders of the Secretary of War, from October 1, 1882, to October 1, 1883:

Officers of the U. S. Army	1
Officers of the U. S. Army (retired)	1
Enlisted men of the U. S. Army	31
Late soldiers of the U. S. Army	3
Late volunteer soldiers	1
Inmates of the United States Soldiers' Home	4
Military prisoners	4
Employés of the Quartermaster's Department	1
Total	46

MILITARY PRISON.

There is no change worthy of note in the conduct of affairs at the Military Prison at Fort Leavenworth. The Board of Commissioners has made its semi-annual inspections, on each occasion carefully examining into the condition of the prison and inquiring into prisoners' complaints. The number of prisoners on June 30, 1882, was 453; and there were in the prison on June 30, 1883, 467. The prison work has continued as usual, with the result of 65,000 pairs of boots and shoes, 30,000 brooms, 4,000 barrack-chairs, and a large amount of harness and other articles useful in the Army.

I renew my recommendation that the officer in charge of the prison shall be given the local rank and the pay and allowances of a colonel, as a just recognition of the importance and character of the service he renders.

BUREAU OF MILITARY JUSTICE.

The Judge-Advocate-General reports the number of records of trials by general courts-martial received, revised, and recorded during the year to be 1,985, being an increase of 131 over the previous year; and the number of records of cases tried before garrison and regimental courts-martial received and filed in judge-advocates' offices at department headquarters during the same period, so far as reported, was 8,404. The number of reports and opinions rendered upon courts-martial and miscellaneous questions of law was 1,487, being an increase of 596 over last year. The number of transcripts of proceedings of courts-martial furnished was 511, and the copies of records of courts-martial furnished in conformity with the 114th Article of War numbered 119.

QUARTERMASTER'S DEPARTMENT.

At the beginning of the last fiscal year there remained in the Treasury to the credit of the Quartermaster's Department $1,182,239.05. The

sum appropriated was $11,375,000, and the balance undrawn at the close of the year $1,295,279.01.

The Quartermaster-General recommends that a reasonable compensation in addition to their pay be allowed to many officers of the line who are required, from time to time, to perform duty as acting assistant quartermasters, and charged with the disbursements of public money and the care and issue of supplies. This should be the same as that allowed to officers performing similar duties in the Subsistence Department. The enlistment of sergeants to assist these officers in their duties is strongly recommended, and he suggests the enlistment of persons who shall be qualified for this work, men who are clerks of experience in the Quartermaster's Department, and that they be designated quartermaster's sergeants; that at every permanent post garrisoned by not less than two companies a quartermaster's sergeant shall be selected by examination from such of the enlisted men of the line of the Army as are competent clerks, and appointed by the Secretary of War, at his discretion, on the recommendation of the Quartermaster-General; also, that the enlisted clerks allowed each post quartermaster shall receive thirty-five cents extra-duty pay *per diem* where thus employed.

There have been authorized 90 new buildings, at an estimated cost of $147,178. Repairs to public buildings have cost, it is estimated, $452,559. Of this sum $4,344 were expended in erecting and fitting up buildings for school and religious purposes. The water supply and system of sewerage have been improved at 21 military posts, costing $51,852. Hospital buildings have cost for construction and repair $74,968.

Preliminary steps have been taken for the erection of the Hot Springs Hospital, for which Congress, by act of June 30, 1882, appropriated $100,000. A contract has been made for the work at $85,335, the lowest offer.

In regard to quartering troops, the necessity for so many very small and scattered military posts is fast diminishing, inasmuch as the Indians are collected on permanent reservations; at the same time the necessity for larger permanent posts near Indian reservations and frontiers is increasing. For these reasons it will add greatly to the economy of maintenance of troops and to their efficiency if they can be assembled at important points in larger and more permanent garrisons. To do this will require special appropriations from Congress; for that reason several important special estimates have been presented, to which attention is respectfully invited.

The important recruiting depot and training school for recruits at David's Island, near New York City, needs an immediate appropriation to replace old, dilapidated, and unsuitable buildings; the sum of $125,000 is needed to begin the work. This work is well known to be a work of pressing national necessity.

It has been found that the buildings at Jefferson Barracks, on the Mississippi River, near Saint Louis, which are old and have been long used as barracks, have become extremely unhealthy for the recruits collected there and trained for the Army. If that post is to continue in use for that purpose, it is believed that new buildings are required to be constructed upon ground hitherto unused, which should be first thoroughly underdrained and then built upon. It will require $100,000 to begin the work of rebuilding this post and bringing it into a proper sanitary condition for its continued use as a recruiting depot and training school for young recruits for the Army.

Transportation was provided by rail, water, wagon, and stage for 65,166 persons, 6,279 animals, and 118,935 tons of material, costing $2,149,051.49—$414,908.84 for transportation of persons, $901,663.23 for live stock and freight, and $384,322.35 on accounts not strictly chargeable either to passengers or freight, leaving $448,157.07 outstanding accounts not settled at the close of the year.

The expenses of military transportation not paid out of the regular appropriations comprise that provided over bonded Pacific railroads, in value $845,144.46, which is credited at the Treasury Department on their debts, and that provided over land-grant roads, to which fifty per cent. of tariff rates is paid under the act of Congress of June 30, 1882, making special appropriation of $125,000 for that purpose. The operations of this service are set forth in accompanying statements.

Special attention is invited to the subject of the railroads indebted to the United States for material sold them in 1865 and 1866. Of the fifty railroads which became indebted to the Government for such purchases, forty-six have settled their debts. The four which the books of the office show as still indebted have made no cash payment for several years, and at present there is no probability that a settlement will ever be reached, and it is suggested that the whole matter be transferred to some other branch of the Government service.

There were purchased 965 cavalry and artillery horses at an average cost of $156.59, and 195 mules at an average cost of $170.02, and 53 draught horses at an average cost of $220.37.

The sales of animals were 937 cavalry and artillery horses, 123 draught horses, and 553 mules, realizing $87,891.32, which is deposited in the Treasury, excepting a small sum received from sales to officers.

There were on hand on June 30, 1883, 16,400 animals, of which 7,797 were cavalry and artillery horses; the remainder, 8,603, were quartermaster's draught and pack animals, as follows: 628 horses, 7,950 mules, and 25 oxen. I had at that date been for some time examining into the necessity of keeping so many draught and pack animals in service, and having become satisfied that in view of the decreasing demand for the service of troops in active field operations a considerable reduction could properly be made, a general order for that purpose was, by my direction, issued on the 1st of August, 1883. The consequent returns

are not yet complete, but it is believed that a reduction of nearly all of the draught horses and of about 2,000 of the mules will result from the execution of this order. This reduction will greatly affect future expenses in keeping and replacing this number of animals, and in the cost of civilian employés caring for and using them.

There were issued during the year 112,596 cords of wood and 49,818 tons of coal.

Inconvenience and sometimes hardship results to officers of the Army serving west of the Mississippi River from the operation of the law of June 8, 1878, which compels the officers to purchase fuel for their own use, and the Quartermaster-General therefore recommends that this subject be brought to the attention of Congress, and that the allowance, when on hand at posts, be supplied as was done before the passage of the act referred to.

Forage issues were as follows: 842,298 bushels of oats, 420,706 bushels of corn, 154,367 bushels of barley, 119,635 bushels of bran, 47,028 tons of hay, 2,945 tons of straw, and 83 tons of fodder.

Illuminating supplies to the value of $53.50, have been supplied to the Army during the year.

Claims under the act of July 4, 1864, awaiting action at the beginning of the year and received during the year aggregated 16,896, amounting to $7,771,174.58; and 71 claims, amounting to $44,388.91, which had been presented to boards and commissions prior to January 1, 1880, were called up during the year. The number of claims on which action was taken was 4,993, amounting to $3,492,208.21; and there remained on hand July 1, 1883, 11,974 claims, amounting to $4,323,355.28. In addition to these there were 138 claims of a miscellaneous character, amounting to $19,259.64; and 216 of that character, amounting to $39,769.28, received action and were reported to the accounting officers of the Treasury Department. Special action was taken in the case of Julia H. Nutt, widow and administratrix of Haller Nutt, as required by the act of Congress approved August 7, 1882.

It is believed that the Army has been well clothed and provided with sufficient equipage, but the working stock to meet emergencies is not sufficient. Improvements in the standard articles are made gradually, from time to time, as the necessities of the service seem to require them.

The Quartermaster-General calls attention to the loan of tents to the sufferers by reason of the overflow of the Mississippi River, by which $4,359.89 worth of property has been lost to the United States by reason of failure to return it. The hospital tents have been much used in this and other ways, under special acts of Congress, and are worn out and the stock exhausted.

The national homes for disabled volunteers have been supplied with much old pattern clothing.

The whole number of national cemeteries now under the care of the Quartermaster's Department is 83, containing 321,369 interments.

There has been some delay in prosecuting the work of providing headstones for the soldiers' graves in private, village, and city cemeteries, but the work will be continued until brought to a satisfactory close. The work on the roadways to the Chattanooga, Mound City, and New Albany Cemeteries, under special appropriations, will probably be finished before the coming winter. The extension of the grounds of the Cypress Hills National Cemetery has heretofore been the subject of various reports, and has had favorable consideration in Congress, and the Quartermaster-General recommends that the attention of Congress be again invited to the subject. The Soldiers' Home Cemetery, near this city, has been enlarged by transfer of additional land belonging to the Soldiers' Home, and an appropriation of $15,000 to pay for the land has been asked therefor. The ownership of the Arlington estate being beyond a doubt now in the United States, the Quartermaster-General earnestly recommends that the beautiful grounds of the cemetery be connected by a bridge across the Potomac River with the projected park on the river flats.

SUBSISTENCE DEPARTMENT.

The report of the Commissary-General of Subsistence presents a full summary of the financial affairs of the Subsistence Department for the last fiscal year.

The completion of another transcontinental line of railroad, and the extension of railroads in the Territories, enable the Subsistence Department to furnish the remote posts with fresh stores more frequently, with less cost to the Government and with less loss from deterioration than heretofore.

The Commissary-General renews previous recommendations, looking to improvement in the cooking of the food supplied by the Subsistence Department for the Army, and suggests that if provision were made by law for the special enlistment of men as cooks and bakers, the health, comfort, and efficiency of the troops would be materially benefited thereby.

It is probable that, during the current fiscal year, all war claims, originally filed in the office of the Commissary-General of Subsistence, under the act of July 4, 1864, will be examined and passed upon as required by that act.

MEDICAL DEPARTMENT.

The total number of deaths from all causes reported from the Army for the fiscal year ending June 30, 1883, is 162 from disease, and 80 from wounds, injuries, and accidents. The casualties from actual warfare during the last fiscal year were few, only two reports of this nature having been received, involving the death of one soldier and the wounding of nine others.

The total number of official demands upon the Surgeon-General dur-

ing the fiscal year for information as to the cause of death in the case of deceased soldiers and the hospital record of invalids was 119,580, being 57,950 in excess of similar applications during the previous year, and an increase of 89,576 cases over the yearly average of demands for the decade preceding. In addition to this large number there remained unanswered June 30, 1882, 21,959 applications, making in all 141,539 cases to be disposed of within as short a period of time as practicable.

As the result of the labors of the year, replies have been furnished to the proper authorities in 109,007 cases, leaving 32,532 searches and replies yet to be made.

The cost of the medical and hospital supplies actually issued during the last fiscal year was $180,139.73.

The act making appropriations for the support of the Army for the fiscal year ending June 30, 1884, approved March 3, 1883, provides—

That civilian employés of the Army stationed at military posts may, under regulations to be made by the Secretary of War, purchase necessary medical supplies, prescribed by a medical officer of the Army, at cost, with ten per centum added.

Proceeds of sales under this act must, under section 3618 of the Revised Statutes, be covered into the Treasury. It is very desirable that the proceeds of sales of medical supplies to civilian employés should, if possible, be carried to the current appropriation for the Medical Department of the Army, and the amount become available for replacing the articles sold. This may have been the intention of the framers of this act, and such Congressional legislation is requested as will permit this course to be taken, and which may be accomplished by excepting "sales of medical supplies to civilian employés of the Army" from the provisions of section 3618 of the Revised Statutes, as is the case with "the sale of commissary stores to the officers and enlisted men of the Army."

In carrying out the laws for furnishing trusses some cases of hardship are found. Persons who held commissions as officers and all persons who were disabled previous to the war for the suppression of the rebellion are absolutely, and those disabled subsequently to this war are practically, excluded from the benefits of these laws, although these persons are pensioned on account of hernia.

It is desirable that the issue of trusses shall correspond to the issue of artificial limbs, as was probably the intention of Congress; that is, that a truss shall be furnished to every one who is ruptured in the line of his duty while serving in the Army or Navy.

The third surgical volume, History of the War, has been completed. It presents a volume containing 986 quarto pages, devoted to matters relating to the surgery of the lower extremities, to *materia chirurgica*, to transportation of wounded by land and water, to the work performed during the war by the medical staff and the ambulance system, and a subject-matter index of all the three surgical volumes.

The additions to the library during the past year include 3,912 vol-

umes and about 5,000 pamphlets, making the total number in the collection about 60,900 volumes and 68,700 pamphlets.

The printing of volume IV of the Index Catalogue has been completed and the addition distributed. The manuscript of volume V is in an advanced state of preparation, and the first part of it is now going to press.

The use of the library by the medical profession of the country continues to steadily increase. It is believed that this library has now become of such importance and utility and is so widely consulted that it should have the means of placing on its shelves as soon as published every new medical work, great or small, in all languages. To do this, and to supply books required to make its files complete in those subjects with regard to which there is the greatest demand for information, will require an annual appropriation of $10,000, and estimates for this amount have been submitted.

The attention of Congress is again called to the great importance to the Army, to the medical profession, and to the nation of providing a suitable fire-proof building for the safe deposit of those valuable collections, the destruction of which would be an irreparable loss.

The Surgeon-General states that, by contract made with Providence Hospital, Washington, D. C., under the act of Congress approved March 3, 1883, appropriating $15,000 for "the support and medical treatment of 75 transient paupers, medical and surgical patients," there have been granted during the fiscal year ending June 30, 1883, 558 permits for the admission to this institution of patients of this class—an average of 46.5 patients per month. In addition to this number it has been found possible, within the limits of said appropriation, to care for a monthly average of 84.75 patients of the same class, who are bedridden, infirm, and helpless, who have gradually accumulated in years past, and who, but for the favorable terms of the contract, would be thrown upon the charity of the public.

Since the date of last report six medical officers of the Army on the active list and three on the retired list have died, and one assistant surgeon has resigned; fourteen vacancies in the grade of assistant surgeon exist October 1, 1883, in the Medical Department of the Army. The names of thirteen approved candidates found qualified by an Army medical examining board for appointment of assistant surgeon will be submitted to the Senate when Congress assembles in December next.

PAY DEPARTMENT.

The report of the Paymaster-General shows that his department during the past year has properly accounted for $15,490,310.54. He urgently recommends the repeal of that part of the act of April 20, 1874, which provides that no officer detailed for the purpose of inspecting the accounts of the disbursing officers of the Army shall be in any way

connected with the department making the disbursement. It is the opinion of the Paymaster-General that this proviso prevents the use for purposes of inspection of officers who, from their intimate acquaintance with the character of the accounts to be inspected, are best qualified to detect any irregularities.

The Paymaster-General again recommends the repeal of the law which forbids payment of mileage to officers for so much of their travel as is over land-grant roads. I concur with him in this recommendation. The provision in question applies only to officers of the Army. Mileage is given to an officer not only to pay the mere cost of transportation, by rail or otherwise, but to cover that expense and his other necessary traveling expenses. Other traveling expenses are just as much over land-grant roads as over other roads; and it is, therefore, recommended that the provision be either repealed, or that over land-grant roads transportation be given, and in addition a reduced rate of mileage to cover incidental expenses.

Attention is also invited to the need of legislation on the subject of paymasters' bonds. A paymaster is required to give a new bond at least every four years; but it is understood that the accounting officers of the Treasury hold that each bond covers all the transactions of an officer under his current commission; and it is represented that for this reason officers experience difficulty in obtaining sureties upon their bonds. I concur with the Paymaster-General in his opinion that the liability of a surety should have some definite limit, and that the remedy which has been enacted in the matter of bonds of collectors of internal revenue and of postmasters should be extended to paymasters. In this connection, it has been brought to my attention that paymasters and other disbursing officers of the Army who are by law required to give large bonds for the faithful discharge of their duties, and to renew such bonds at stated periods, meet with peculiar difficulties in procuring such bonds. Ordinarily, an officer of the Government who is required to give a bond performs his duty in the neighborhood where he is well known, and where it is not difficult for him to procure proper sureties. A disbursing officer of the Army is permanently separated from his home, and in the course of his official life enters upon his duties at many stations where he is an entire stranger to all but his brother officers. The difficulty in procuring satisfactory sureties upon official bonds, and indeed the difficulty of procuring them at all, under such circumstances, is apparent. It would be of great advantage to such officers if they were permitted by law to furnish as security the obligation of some approved guaranty company organized for the purpose of indemnifying employers in this manner. At a small cost to themselves, officers would be saved much repeated embarrassment, and I confidently believe that the security to the Government would be much increased. Doubt is entertained whether, under existing laws, the Secretary of War is authorized to accept as surety any such com-

pany, and I have therefore declined to do so. I recommend, however, that the existing laws on this subject be so amended as to authorize the head of a Department to accept corporate as well as individual sureties upon official bonds.

ENGINEER BUREAU.

Attention is specially invited to that portion of the report of the Chief of Engineers which refers to the defenses of our sea-coast and lake frontier. The views of the Engineer Department as to the necessary measures to secure the harbors of the United States from maritime attack have been clearly set forth in former annual reports, especially those for the years 1880 and 1881. While our defense for many years must depend upon the completion of barbette batteries designed for modern guns and upon our system of torpedoes, the use of armor has not been overlooked, and plans have been prepared for the application of the turret system to some of our most important harbors. Our sea-coast, with its great cities and important harbors, is defenseless to-day against the attack of a modern iron-clad, and it is humiliating even to imagine the mortification, loss of life, property, and prestige to which we would be subjected should war come suddenly upon us, as, the history of nations shows, may happen at any time.

For many years no appropriations have been made for continuing the construction of our forts; and the barbette batteries, designed for the country's defense, are incomplete and rapidly going to ruin. It appears to be not only a matter of prudence but of absolute necessity that these works, so long delayed, shall at once be commenced and pushed to a speedy completion.

Attention is invited to the necessity for electrical rooms and cable galleries for the most important of our sea-coast works. However well developed our torpedo system may be, it will be comparatively useless so long as our instruments for firing submarine mines and our connecting cables are unprotected from the enemy's artillery. There should certainly be no further delay in constructing these comparatively inexpensive, but absolutely necessary, adjuncts to the system of torpedo defense.

The balance in the Treasury July 1, 1882, to the credit of appropriations for improving harbors and rivers was $4,738,263.58. The appropriations by the acts of June 19, 1882, August 2, 1882, and March 3, 1883, were $18,751,335, and the sum of $373,592.24 was drawn from indefinite appropriations for constructing jetties in the South Pass, Mississippi River; operating and care of various canals; and removing sunken vessels obstructing navigation. The drafts (including $500 transferred to the Interior Department) by requisition during the year were $13,841,541.27, leaving a balance of $10,021,649.55 in the Treasury July 1, 1883, and on the same date there was in the hands of officers or on deposit to their credit the additional sum of $2,362,254.10. Since

that date and up to November 1 there has been drawn from the Treasury $4,966,811.27.

For information relating to the improvements in progress I beg to refer to the report of the Chief of Engineers, which contains a detailed account of the steps taken to carry out the provisions of law and of the progress and condition of these works.

Respecting the surveys for the improvement of rivers and harbors called for by the act of August 2, 1882, the preliminary examinations have been completed, as required and provided for in that act, to ascertain and determine which of the localities enumerated are worthy of improvement, and in what cases the work is a public necessity. The reports of the results of these examinations in each case will be made the subject of a special communication to Congress. Such surveys as have been found to come within the provisions of the act have been undertaken and are in progress. The reports thereon will be submitted to Congress from time to time during the ensuing session as they are received.

Preliminary arrangements are still incomplete and in progress under the direction and supervision of Mr. M. J. Adams, the inventor, for making a practical test of a flume for increasing the depth of water of the Mississippi, for which the sum of $20,000 was provided by act of March 3, 1879, and a further sum of $8,000 by act of August 2, 1882.

A report of the progress made between October 10, 1881, and December 1, 1882, by the Mississippi River Commission in carrying out the work intrusted to it was transmitted to Congress December 29, 1882. The subsequent progress of that important work will be made the subject of a special communication to Congress at an early period of the ensuing session.

The final report of the survey of the northern and northwestern lakes has been printed. The results of this survey are embodied in sixty-seven engraved charts, which are furnished under proper regulations to all vessels navigating the lakes.

Office work has been continued in completing the maps and reports connected with the survey of territory of the United States west of the 100th meridian. There are thirteen atlas sheets now ready for publication. It is expected that the office work connected with this survey will be completed by December 31. The small appropriation asked for the next fiscal year for surveys required for military purposes, and for the publication of maps for use of the War Department, is earnestly recommended.

Improvement of the South Pass of the Mississippi River.

The last annual report of this Department brought the history of this work to September 9, 1882. During the four quarters ending September 9, 1883, there was no failure of maintenance of the channel. From

September 10, 1882, to September 9, 1883, both dates inclusive, four quarterly payments for maintenance, amounting to $100,000, and two semi-annual payments of interest on the $1,000,000 retained, amounting to $50,000, were made, the total expenditure for the improvement to the latter date being $4,850,000.

Attention is called to the failure of any provision for the fiscal year ending June 30, 1884, to meet the cost of the examinations and surveys required by law to ascertain the depths of water and widths of channels maintained at the South Pass. The amount available for this purpose June 30, 1883, was $6,048, barely sufficient to continue these examinations and surveys to December 31, 1883.

ORDNANCE DEPARTMENT.

There were manufactured at the National Armory at Springfield, Mass., during the year ending June 30, 1883, 33,621 small-arms.

The three systems of magazine guns mentioned in my last annual report as having been recommended for trial are still in process of manufacture. It is believed that a sufficient number of each kind for trial in the field will be ready early next spring.

Great attention has been given by the Ordnance Bureau to carry into effect the appropriation made in the act approved March 3, 1883, for making, converting, and testing rifled cannon. A number of contracts have been made, which are in process of execution. It had first to be considered whether or not gun steel in suitable masses and of the requisite quality could be procured in this country. In order to receive all possible information on this point, a very full circular letter, of which a copy is given in the report of the Chief of Ordnance, was sent to the principal steel works in the United States. The replies received showed that the plant or the experience in this country cannot as yet produce the steel forgings for tubes and jackets for so large a gun as one having an 8-inch caliber. Those required for such guns and for guns of larger caliber have, therefore, been contracted for in England. Smaller steel forgings have been undertaken in Philadelphia, and the tests thus far made of them show that they are fully equal in quality to the best European manufactures.

It is not possible to make a satisfactory abridgment of the very interesting information given by the Chief of Ordnance in his report respecting the construction of the various kinds of guns now going on, and for information respecting them reference is made to his report.

Under the provisions of section 1 of the act making appropriations for the naval service for the year ending June 30, 1884, a board, composed of officers of the Army and Navy, was, on the 2d of April, 1883, constituted by the President, to examine and report which of the navy-yards or arsenals owned by the Government has the best location and is best adapted for the establishment of a Government

foundry, or what other method, if any, should be adopted for the manufacture of heavy ordnance adapted to modern warfare. This board first visited the principal iron and steel works in this country, and then went abroad to pursue its investigations among the great steel works and gun factories of Europe. It has recently returned, but its report has not yet been made. It is hoped that it will be able to submit to Congress such a strong and full report, and make such definite recommendations, that Congress will be able to take prompt action towards providing for the great want of the country in suitable facilities and plant for the manufacture of heavy ordnance.

REPORT OF THE CHIEF SIGNAL OFFICER.

Full details of the work of the Weather Bureau will be found in the report of the Chief Signal Officer, the character of which is similar to that explained in previous annual reports.

The Chief Signal Officer, however, calls attention to the insufficiency of the appropriations made last year for this work, arising mainly from the specific appropriations made in the last act being less in amount than the customary expenditures of the service, but in part out of what was no doubt an inadvertent omission to appropriate, in the detailed appropriation bill enacted especially for this service, for certain items of expense necessary if this service is to be maintained. Undoubtedly omissions of this character should be corrected if the service is to be supported; but I trust that the temporary prohibitory legislation enacted at the last session of Congress, preventing the Secretary of War from making unlimited drafts, at his discretion, upon military appropriations to carry out the provisions of sections 221 and 222 of the Revised Statutes, which have no relation to military matters, will be made permanent at the approaching session of Congress; and that the making of separate appropriations for the Signal Service will be continued, so that the amount expended for it will not be upon the sole responsibility of the Secretary of War.

The report of the Chief Signal Officer shows, somewhat in detail, the measures taken in pursuance of a provision in the sundry civil act of 1883 to bring back to this country the two Arctic expeditions, one at Lady Franklin Bay, and the other at Point Barrow. The report of the Chief Signal Officer being for the year ending June 30, 1883, does not include the subsequent history of the relief expeditions. The Point Barrow party has safely returned.

On June 29th last, a well-equipped relief party sailed on a hired steam sealer, the Proteus, from Saint John's, Newfoundland, with instructions to reach Lady Franklin Bay if possible, and to bring back Lieutenant Greely and his party. Arrangements were here made with the Navy Department to have the United States steamer Yantic accompany the sealer as far north as it was safe for the Yantic to go, so that it might render any assistance in what it was not improb-

able would be a perilous voyage. It was contemplated that, in case the Proteus should not be able to reach Lady Franklin Bay, a well-provided relief station was to be established at a point near the entrance to Smith's Sound, from which, as a base, Lieutenant Greely was to be sought for, with the expectation that both parties would easily be relieved and brought home in the year 1884.

The Proteus, with the relief party and supplies on board, parted from the Yantic at the beginning of the voyage, and penetrated a short distance into Smith's Sound; was there caught in the ice and destroyed, with nearly all its stores. The party on board made its way southward; was finally taken up by the steamer Yantic and brought home, arriving at so late a season that, after careful consideration, it was determined that there was little if any chance of success for another expedition sent north this season, and that the probability of disaster to such an expedition was very great. A copy of a memorandum of the views of the Secretary of the Navy and myself made at the time is appended. The general conduct of the relief expedition on the Proteus is being investigated by an Army court of inquiry now in session in the city of Washington.

It will be necessary that early provision should be made to fit out another expedition for the relief of Lieutenant Greely and his party. Their exact situation and condition is only a matter of conjecture. They have had with them at Lady Franklin Bay a supply of food, clothing, and other necessaries entirely sufficient to last them until next summer; and there would be no reasonable apprehension for their safety if it were known that they had remained and were now at Lady Franklin Bay. It is possible, however, that inasmuch as the relief expedition of the year 1882 did not succeed in connecting with Lieutenant Greely, he, in pursuance of prearranged plans, late in the summer of this year left Lady Franklin Bay to come southward to the entrance of Smith's Sound, and that, relying upon finding there an abundant supply of the necessaries of life, he neglected to burden himself in the southward journey with a greater quantity of provisions and clothing than would be necessary to support his party on the journey. Even in this case his condition would be by no means desperate, for at this point and further north there are supplies, and if they should prove not sufficient to support him and his party until a vessel can reach him in 1884, it is thought that it would not be impossible for him to retrace his steps and reach the supplies left at Lady Franklin Bay, although such a journey would be disheartening and very difficult, even if his party should be in good condition.

RECORDS OF THE WAR OF THE REBELLION.

The general examination of the records, both Union and Confederate, has been completed. Any further examination that may be necessary will be for such missing links as may be developed in the compilation.

The formal reports of military operations made by the Union commanders have all been copied, and those made by the Confederate commanders will be copied by the end of the next fiscal year.

Nine volumes in all have now been published; seven more are in the hands of the printer nearly completed, and the manuscript of five additional volumes is arranged for printing.

MONUMENT AT YORKTOWN.

The commission of artists, consisting of Messrs. Hunt, Ward, and Van Brunt, who furnished the design which was accepted by the joint congressional committee, having completed its details and prepared specifications, proposals were called for by advertisement of November 27, 1882. The contract was awarded in February, 1883, to the Hallowell Granite Company, of Hallowell, Me. The quarrying of the stone has been in progress, as also the preparation of the models for the sculptor's work. The monument is to be completed by October, 1884, the execution of the contract being under the supervision of Lieut. Col. W. P. Craighill, Corps of Engineers.

BUILDING FOR STATE, WAR, AND NAVY DEPARTMENTS.

The north wing of this building was completed in December, 1882, and soon after occupied by this Department. Work on the approaches has been commenced, and will probably be finished during the present season.

There now remain the west and center wings only to complete the building. As the first appropriation for these was not made until August, 1882, ground cannot be advantageously broken until the spring of 1884, when a sufficient quantity of cut granite will be accumulated. The whole sum of $500,000, included in the annual estimates of this Department, should be granted, in order that the work on these wings can go on rapidly and uninterruptedly.

The comparatively small portion of the building now occupied by this Department is entirely inadequate for its needs, and the security of the valuable public records still stored in scattered hired buildings requires that the new building should be completed without delay.

EDUCATION IN THE ARMY.

The officer in charge of education in the Army reports that progress has been made in systemizing and rendering more effective the post schools already established, and that there is a deeper interest in the subject than ever before. The average attendance was greater than in the year before. I again recommend legislation authorizing the enlistment of 150 competent instructors, with the rank and pay of commissary sergeants. The work cannot be done satisfactorily by the detail of enlisted men, as is now necessary. At three of the military posts the officers and enlisted men have themselves hired teachers, at a compensation of fifty dollars per month.

THE MILITIA.

The report of the Adjutant-General shows that in many of the States much attention is being given to the improvement of the militia. As stated in my last annual report, officers of the Army are sent, whenever requested by the proper State authorities, to be present at militia encampments to inspect the troops, and to give any assistance in making the encampments successful and profitable to those who take part in them, so far as is possible. Officers were, accordingly, sent during the last year to encampments in nine different States, and the reports of the inspecting officers, given in full by the Adjutant-General, are interesting and instructive.

I earnestly recommend that the attention of Congress be invited to the subject of giving substantial encouragement to the formation of volunteer militia organizations in every State, and in the District of Columbia, by liberal appropriations to supply the necessary arms, equipments, tents, ammunition, and other ordnance stores. With our small standing Army, our main dependence for public defense must be on our militia; and the wisdom of the comparatively small expenditures which would encourage their organization, and their efficiency in drill and discipline, seems apparent. In the last Congress a bill on this subject was reported from the Senate Committee on Military Affairs (S. 1596), by which it was contemplated that in lieu of the annual sum of $200,000 provided by the act of the 23d of April, 1808, the sum of $600,000 should be annually appropriated, the purposes for which it should be used being more extended than under the provisions of the old act. A careful consideration of this proposed act leads to the belief that its enactment would be a great public benefit, and I strongly recommend the passage of such a law.

I believe it to be especially the duty of Congress to make a new enactment respecting the organization of the Militia in the District of Columbia. The act now in force, in its essential parts, is nearly a century old, and is not adapted to the present situation of affairs. It is believed that, under appropriate legislation, an efficient and creditable organization of the Militia in the District of Columbia could be easily effected.

ROBERT T. LINCOLN,
Secretary of War.

PAPERS

ACCOMPANYING

THE REPORT OF THE SECRETARY OF WAR.

REPORT OF THE GENERAL OF THE ARMY.

HEADQUARTERS ARMY OF THE UNITED STATES,
Washington, D. C., October 27, 1883.

SIR: I now have the honor to make this my last annual report.

Preliminary thereto, I submit the annual reports of the Adjutant and Inspector Generals (the only heads of Bureaus who report direct to the General-in-Chief) and of the commanding generals of the three divisions into which the territory of the United States is divided, with the reports of the several department commanders, who occupy the same relation to the former that a brigadier holds to a division commander of an army in the field. These are grouped as follows:

1st. Report of Adjutant General Drum, inclosing the usual tables, "organization of the Army," "actual strength of the Army," "distribution of the troops," "list of existing military divisions, departments, and posts," "casualties," "assignment of recruits," &c.

2d. Report of Inspector-General Sacket.

3d. Report of Lieutenant-General Sheridan, of the Division of the Missouri.

3 A.—Report of Brigadier-General Terry, of the Department of Dakota, with sub-report of Col. T. H. Ruger, of the District of Montana.

3 B.—Report of Brigadier-General Howard, of the Department of the Platte.

3 C.—Report of Major-General Pope, of the Department of the Missouri, with sub-report of Brigadier-General Mackenzie, of the District of New Mexico.

3 D.—Report of Brigadier-General Augur, of the Department of Texas.

4th. Report of Major-General Hancock, of the Division of the Atlantic, and of the Department of the East.

4 A.—Report of Col. H. J. Hunt, Fifth Artillery, of the Department of the South.

5th. Report of Major-General Schofield, of the Division of the Pacific, and of the Department of California.

5 A.—Report of Brigadier-General Crook, of the Department of Arizona.

5 B.—Report of Colonel and Brevet Major-General Wheaton, of the Department of the Columbia.

From these reports it will appear that the Army consists of 25,478 aggregate, as follows:

	Officers.	Men.
General	11	
General staff	561	1,186
Ten regiments of cavalry	429	6,811
Five regiments of artillery	280	2,410
Twenty-five regiments of infantry	861	10,555
Indian scouts		210
Detachments	1	2,163
Aggregate	2,143	23,335

These figures are almost identical with those of last year, and the current of military events during the same period has been of the most peaceful character. Nothing has occurred to disturb the rapid development of the great West, which is now completely open to the immigrant in regions where a few years ago no single man could go with safety. There have been no wars or "rumors of wars" in any of the Territories of the United States, with the single exception of Arizona, and even there the hostiles belonged to our neighbor, Mexico. General Crook, in order to reach the source of trouble, had, with the consent of the Mexican authorities, to go 200 miles into Mexico to strike the Apaches in their mountain fastness, which he did with success. I invite special attention to his report, because I think he has touched, with a master's hand, the cause of the conflicts with our Indian foes, and I believe that if he be permitted to manage the Apaches in his own way all wars will cease in Arizona, and with them will disappear the complicated Indian question which has tested the patience and courage of our people ever since the first settlement by whites on this continent.

During this time of profound peace the military authorities have given their best thoughts to "military education" and to "target practice;" and in this connection, out of a large mass of reports, I have selected for printing and general reference the following:

6th. Report of Colonel and Brevet Major-General Merritt, of the Military Academy, West Point, New York.

7th. Report of Maj. L. L. Livingston, Fourth United States Artillery, of the Artillery School at Fort Monroe, Virginia.

8th. Report of Col. E. S. Otis, Twentieth United States Infantry, of the School of Instruction for Cavalry and Infantry at Fort Leavenworth, Kansas.

These cover the whole ground of military education, from the boy appointed as a cadet to the thorough officer of the several arms of service; and I am convinced, after having seen many of the most celebrated military schools of the world, that ours are among the best, and are well adapted to the character of our people and institutions. The Military Academy at West Point is the creation of law—is rather a Congressional school than military. Each cadet represents a member of Congress, or rather a Congressional district, with the exception of the ten appointed at large; and the cadet only comes into the Army proper after his graduation, and after being commissioned as an officer. Yet, whilst undergoing instruction, the Corps of Cadets is subject to military law and discipline, and thus becomes an integral part of the Army of the United States. The education imparted at West Point always has been and must continue to be preliminary—that is, common to the whole human race—calculated to prepare them for the work of

life, whether it be military or civil, such as mathematics, language, chemistry, natural philosophy, &c.; so that a cadet may graduate at West Point and yet not be familiar with the knowledge indispensable to feed, clothe, manage, and fight a company or a regiment, which are the ultimate objects of all Army education, and, therefore, the practical schools at Forts Monroe and Leavenworth have been found most advantageous, even for cadets who have graduated with honor at West Point. The school at Fort Monroe is *special* for the artillery, and is as necessary to the Army as a separate special training is for a surgeon, for a lawyer, for an engineer of a ship, or for one who manages a railroad train; and I am convinced that by the simple instrumentality of this admirably conducted school we now have secured a trained body of artillery officers capable of handling with skill the most massive and complicated of modern artillery, and able to continue the instruction for all time to come.

By mounting and equipping two batteries instead of one to each regiment of artillery, as accomplished by General Orders No. 96, Headquarters of the Army, of 1882, we doubled our capacity for instruction in that most useful and captivating branch of the military service.

In like manner the school recently established at Fort Leavenworth for cavalry and infantry is designed and calculated to give more perfect instruction in these most essential branches of the military service. This school is for commissioned officers of the Army, temporarily detailed away from their proper companies, without any increased pay or allowances, adding not a cent to the annual estimates, yet calculated to prepare the junior officers for the highest sphere of military life.

In times of peace we are all apt to forget that war is ever liable to occur, and I only wish in this connection to remind many a man now living of the sudden call in 1861 for military knowledge. We now possess three admirable schools, well located, well managed, which fulfill that purpose in an eminent degree, and I bespeak for them your ardent support and encouragement. They need nothing else.

The report of the Adjutant-General, herewith, does not show the same satisfactory condition of the "post schools" for enlisted men and soldiers' children at the various military stations. Indeed, since the passage of the law substantially abolishing "camp women," the number of soldiers' children has largely diminished, so that there is no urgent call for such schools; and after an enlisted man has learned to read, with few exceptions, he is content with the advantages of the post libraries, which contain the usual supply of histories, novels, magazines, and newspapers. Grown men, such as compose our ranks, do not want to subject themselves to the average pedagogue, and schools for the enlisted men must be voluntary. The reading-rooms at all our frontier posts are most creditable, and are well patronized.

So with target practice and the usual athletic games, good progress is reported everywhere, and so far as they have fallen under my observation they are admirably conducted, calling for no changes in the present methods.

I now regard the Indians as substantially eliminated from the problem of the Army. There may be spasmodic and temporary alarms, but such Indian wars as have hitherto disturbed the public peace and tranquillity are not probable. The Army has been a large factor in producing this result, but it is not the only one. Immigration and the occupation by industrious farmers and miners of lands vacated by the aborigines have been largely instrumental to that end, but the *railroad*

which used to follow in the rear now goes forward with the picket-line in the great battle of civilization with barbarism, and has become the *greater* cause. I have in former reports, for the past fifteen years, treated of this matter, and now, on the eve of withdrawing from active participation in public affairs, I beg to emphasize much which I have spoken and written heretofore. The recent completion of the last of the four great transcontinental lines of railway has settled forever the Indian question, the Army question, and many others which have hitherto troubled the country. I did intend, before retirement, to sketch out my own experience and knowledge of this most interesting and important subject, and with this end in view I determined, last spring, to cross the continent, westward, substantially by the great lakes and by the line of the Northern Pacific Railway, to return by that along the thirty-fifth parallel, having in previous years traversed the country by every other known route. I started on the 20th of June and traveled till the 8th of October, having along, with others, my aide-de-camp, Col. J. C. Tidball, of the artillery, who took careful notes, and whose report herewith, marked 9, is more full and satisfactory than any I can possibly reproduce from memory. Also, before starting, I instructed my aide-de-camp, Col. O. M. Poe, of the Engineer Corps, to rake among the public archives for a condensed, yet accurate, history of the conception, rise, progress, and completion of these transcontinental roads for my use on return. His report, herewith, marked 10, is also so complete and condensed that I beg to submit it entire, to be construed as part of my own report, better arranged than any I can do myself, and to it I invite your special attention. I regard the building of these railroads as the most important event of modern times, and believe that they account fully for the peace and good order which now prevail throughout our country, and for the extraordinary prosperity which now prevails in this land. A vast domain, equal to two-thirds of the whole surface of the United States, has thus been made accessible to the immigrant, and, in a military sense, our troops may be assembled at strategic points and sent promptly to the places of disturbance, checking disorders in the bud.

Railroads, however, are instrumentalities rather than substantial causes. They are easily broken and interrupted, because a single man, from malice or enmity, may in a minute displace a rail, move a switch, or fire a bridge, which will require a week or month to repair, interrupting all travel. They require a station, with sidings, every ten miles, water-stations at convenient and short intervals, and costly repair-shops every hundred miles. These constantly call for the protection of the military usually posted on or near the lines. Whilst these roads enable us to send soldiers to threatened points at the rate of five hundred miles a day, thus overcoming the space in one day which used to require a full month of painful marching, these soldiers must in advance be thoroughly organized, equipped, provided and instructed beforehand, because they must be ready for action the moment they reach their destination. It is then too late for preparation, so that the necessity for trained soldiers in advance of the call is rather increased than diminished by these modern developments.

I therefore renew the recommendation of last year, as contained in my letter to you of October 16, 1882, that the strategic points therein named shall be adequately enlarged, with permanent barracks, so as to accommodate suitable garrisons, and that all minor places be abandoned by the military. This will in the end result in economy as well as efficiency. I admit that there exists a tendency to extravagance on

the part of the military as well as of the civil agents of the United States; but the day is past when a soldier will be content to live in "dug-outs," on "his pound of bread, pound of meat, and gill of whisky" per day, whilst the farmer, mechanic, and laboring man alongside has a good house, with coffee, sugar, vegetables, and a well-provided table. We must now treat the soldier as a fellow-man. Let him live as his neighbor, with similar comforts, and he will respond to the call of duty even to the death, as of old. I believe, with General Augur, that there has been a good deal of "loose talk" about overworking the soldiers. I have recently seen them work cheerfully at Cœur d'Alene and Spokane side by side with the civil mechanics, on the same scaffold. The soldier in America should be paid in comparison with his neighbors, and not according to the scale of foreign armies, about which he knows nothing and cares less. He is willing to abide by his contract of enlistment, provided he receives extra pay proportioned to the extra work imposed on him when employed on labor not military, and the price for this extra labor should be proportioned to its value on the spot. The local quartermaster, subject to the discretion of the department commander, under rules prescribed by the Secretary of War, can fix the value of this labor better than any other person. The law should define what kind of labor is to be paid for, because every soldier should build his own bivouac and house his own provisions; but when employed as a carpenter, mechanic, or laborer, on roads, bridges, or buildings of a permanent nature, it is only fair that he should be paid for such labor, or at least receive a credit for it to be paid on his final discharge. This would remove all the clamor about making our soldiers a body of cheap workmen, and take away the alleged excuse for desertion. I am satisfied, from personal observation, that the condition of the soldier to-day is far better than it was in 1846, and that each year it improves by the increased mail facilities, better quarters, better food, and better treatment.

In this report I have purposely abstained from making any recommendations for the future, other than renewing such as had been made in former reports, because on the 1st day of November, at my own request, I will be permitted to transfer the command of the Army to my successor, Lieutenant-General Sheridan, with ample time for him to make such recommendations as he may deem wise and necessary for the action of the next Congress. On the 8th day of February, 1884, I will attain the limit of age fixed by Congress for military service in the Army, and I purposely asked of the President the privilege of anticipating this date to enable my successor to make such recommendations as he may deem necessary; but before leaving I beg to record an expression of opinion that it will be found wise to provide a common organization for all arms of the service, viz: That each regiment of infantry be composed of twelve companies, the same as now with the artillery and cavalry, making three battalions, each of four companies in time of peace, and of eight in time of war; that each company shall have a hundred men; and that in time of peace two of these battalions (eight companies) shall be maintained on a perfect war footing, whilst the other battalion (four companies) may be a mere skeleton, with its complement of officers, and used as a nucleus for recruits. In this battalion can be placed the officers and soldiers invalided by hard service or by sickness, and such as are not yet weaned of home influence or family importunity.

Were such an organization (thus briefly sketched, but more elaborately described in former reports) to be sanctioned by Congress, the

military peace establishment could, I believe, be maintained on the present estimates, and would possess the inestimable advantage of admitting of an increase without "disorder or confusion" to 6,000 artillery, 12,000 cavalry, and 30,000 infantry by the mere scratch of a pen and the magic wand of money; and afterwards by doubling the enlisted strength of each company without the further addition of a single officer we should have the respectable force of 96,000 men, a force large enough for any probable necessity during the remainder of this century.

The militia and volunteers of the States would soon follow suit, and we should have throughout the country these small handy battalions of four companies instead of the large cumbersome regiments of ten companies—a bad tactical unit, and in practice always scattered.

I also do believe Congress should make provision for the transfer of regiments from remote stations to home stations after a fair detail or period of service fixed by law, just as the English Government does. For instance, the 21st Infantry has been on the Pacific coast fourteen years, and ought to come in, but there is no money to pay the cost. Justice and fair dealing are qualities which are of universal application, and I am sure that Congress, on a fair showing, will not withhold the means of transportation, especially now when the Treasury is groaning under a surplus revenue, caused, in part, by the conduct of the very men who appeal to them; for I honestly believe the Army of the United States has in the past fifteen years protected, defended, and encouraged the building of its transcontinental railroads and the settlement of the great West, which are the chief causes of the great prosperity which now blesses our land.

Thanking you for past and present courtesies, I am, with great respect, your obedient servant,

W. T. SHERMAN,
General.

Hon. ROBERT T. LINCOLN,
Secretary of War.

REPORT OF THE ADJUTANT-GENERAL.

HEADQUARTERS OF THE ARMY,
ADJUTANT-GENERAL'S OFFICE,
Washington, October 00, 1883.

GENERAL: Pursuant to your instructions, I have the honor to submit the annual returns of the Army:

A.—Organization of the Regular Army.

B.—Return showing actual strength of the Regular Army.

C.—Distribution of troops in the Departments of the Missouri, Texas, the Platte, and Dakota—Division of the Missouri.

D.—Distribution of troops in the Departments of the East and South—Division of the Atlantic.

E.—Distribution of troops in the Departments of California, the Columbia, and Arizona—Division of the Pacific.

F.—Military geographical divisions, departments, and posts, with distribution of troops, post-offices, telegraph stations, and nearest railroad stations or boat landings.

G.—Statement of casualties during the fiscal year ending June 30, 1883.

H.—Statement of the number of trials of enlisted men by general courts-martial during the fiscal year ending June 30, 1883.

I.—Statement of assignments of recruits and re-enlistments during the fiscal year ending June 30, 1883.

The number of enlisted men now in the service who are drawing increased pay under act of Congress of August 4, 1854, is as follows:

Five years' continuous service	3,355
Ten years' continuous service	1,789
Fifteen years' continuous service	796
Twenty years' continuous service	105
Twenty-five years' continuous service	99
Thirty years' continuous service	50
Total	6,194

The number of those who will become entitled to increased pay under act of Congress of May 15, 1872, during the fiscal year ending June 30, 1885, is—

Re-enlisted pay	554
One dollar per month for third year of service	5,398
Two dollars per month for fourth year of service	3,647
Three dollars per month for fifth year of service	2,478
Total	12,077

and the number of enlisted men in service whose terms will expire during the same fiscal year is 3,490.

A comparison of the data contained in the several tables submitted with those in the tables accompanying my last report shows but little alteration. The number of men who have served from ten to thirty years is 2,839, and of the 22,851 men on the rolls of the Army June 30, 1883, over 40 per cent. had served four or more years.

Under present law, men who have honorably completed their term of service are granted increased pay provided they re-enlist within thirty days from date of discharge. While its provisions secure to the Army the services of many good men, I am of opinion that its amendment making increased pay contingent on immediate re-enlistment of the men in *their own regiment*, and granting them a furlough of thirty, sixty, or ninety days, according to the length of previous service, would prove vastly beneficial in fostering *esprit de corps*, the very life of military organizations.

The importance of the subject of desertion, and the absolute necessity, looking to intelligent and active remedial action, of determining the probable causes which led men to desert the service, resulted in the issue of a regulation ordering boards of survey to be convened whenever a desertion took place, for the purpose of determining the attendant circumstances, and especially the real or alleged cause. An analysis of the special reports received from the several military headquarters is submitted under the head of "desertion," and, I beg to invite your attention to it, and to the proposed remedial measures which, it is thought, will best insure the reduction of this most serious military crime.

DESERTION.

I beg to submit the following synopsis of the reports received from the several military departments:

DEPARTMENT OF ARIZONA.

Total number of desertions, 204.

Reasons assigned by boards.—Bad character, 29; drunken and dissipated habits, 12; dissatisfaction, 28; desire to obtain better wages, 9; home influences, 12; and enlisted to go west, 13.

The department commander, after review of reports, indicates the following causes and submits remedies as follows:

Causes.—Too much manual labor, which, at present, it is impossible to remedy; from scarcity and high price of vegetables in the Territory the ration is possibly less than is needed; and men enlisting for the purpose of securing free transportation to the west.

Remedies.—Increase of punishment for desertion and of reward paid for apprehension; low estimate in which soldiers are held in civil communities to be remedied by raising character of the service; appointments to the Army to be absolutely limited to the Military Academy and the ranks.

DEPARTMENT OF THE EAST.

Total number of deserters, 180. Nativities: United States, 85; foreign countries, 63; and unknown, 32. Seventy of the deserters bore a good character prior to their offense, and 23 ranged from bad to utterly worthless. Number of desertions within 6 months of enlistment, 54; in first year of service, 91; second year of service, 42; third year of service, 17; fourth year of service, 1; and service not given, 29.

Causes.—Intemperance, restlessness, and discontent; marriage with Canadian women on the part of men at frontier posts and facility and security in desertion into Canada.

Remedies.—Change in present system of clothing accountability—a serious cause of discontent, especially to recruits; inducements that will make men take up the military service as a career instead of a make-shift; higher pay for non-commissioned officers, who are, or certainly should be, not only soldiers of long and faithful service, but also possessed of good military qualifications and a fair general education; finally, above all these, there should be a liberal pension allowance, to enable men who have given to the service their days of usefulness to live decently in their declining years, and keep them out of the almshouse.

DEPARTMENT OF THE MISSOURI.

Total number of deserters, 423.

Reasons assigned by boards.—Indebted to the Government, 240; prior trials by courts-martial, 65; recaptured, 43; tried for desertions but acquitted, 5; drunken and dissipated habits, 20; dissatisfaction, 42; and to obtain better wages, 37.

Thirty-four of the deserters possessed good characters, 22 bad, and 19 were reported utterly worthless.

Number of desertions in first year of service, 281; second year of service, 103; third year of service, 17; fourth year of service, 2; and after serving one or more terms, 20. Four of the desertions among old soldiers resulted from embezzlement of public property, and three from incorrigible habits of dissipation.

While the cause is laid to a faulty system of recruiting, no remedy is indicated.

DEPARTMENT OF THE PLATTE.

Total number of deserters, 210.

Two hundred and twelve boards of survey were held, but in two cases the men were not considered guilty of desertion, leaving the number of deserters as above. While in more than half the cases the boards could not discover any assignable cause, in others the reason found is: Fear of recognition as deserters, 10; dissatisfaction, 26; en-

listed to go west, 10; drunken and dissipated habits, 12; and desire to obtain higher wages, 4.

Remedies.—Higher reward for apprehension of deserters and more severe punishment for the crime; fraudulent enlistments to be punishable by court-martial; marking of deserters; privilege granted absentees to surrender within one month, with assurance of trial for absence without leave only; first term of service limited to three years; re-enlistment to be for two or three years, and all subsequent re-enlistments to be for one or two years; no reason is seen why, as done in the British service, the Government should not grant a man his discharge on repayment of expenses of enlistment, or a fixed sum, say $100.

Examination of reports indicate that 90 per cent. of the desertions took place within the first two years of service, and 65 per cent. in the first.

DEPARTMENT OF THE SOUTH.

Total number of deserters, 67.

Number of desertions within six months of enlistment, 43; in first year of service, 52; second year of service, 7; third year of service, 4; fourth year of service, 2; and after serving one or more terms, 2.

In more than one-half the cases the boards were unable to assign any sufficient reason for the desertions.

Causes.—Discontent and recklessness, coupled with hard work and severe duty; lack of restraining moral influence to prevent a discontented man from deserting; small esteem in our communities for the position of a soldier, the bad conduct of a small percentage of the men confirming the ill-feeling toward the whole of them, to the disgust of the large body of good men; deficiency and lack of variety in food.

Remedies.—More frequent payments would diminish the evil; in time of peace deserters to be tried by civil courts, and legal punishment, on conviction, to be imprisonment in a penitentiary. This mode of dealing with deserters would tend materially to change the views of the community about deserters. First term of service to be shortened; second and subsequent engagements not recognized as re-enlistments unless made within sixty days in the same regiment; increase pay of non-commissioned officers, opening to soldiers a reasonable prospect of substantial advantage as the reward of good service; regimental commanders to be empowered to purify their commands by summary discharge of disreputable or worthless characters; careful regulation of power of confining men in the guard-house; change of present mode of settling clothing accounts—at present a fruitful source of discontent; laundresses should be restored and a certain proportion of the men allowed to marry. If company commanders are careful about their laundresses, the presence of the latter is in every way beneficial. There are more married men under present system than before its adoption, and on a change of station the men have to desert either their families or the service.

DEPARTMENT OF TEXAS.

Total number of deserters, 325, or 13.36 per cent. of mean strength of command. Nativities: United States 206, and foreign countries 86. Rank: Sergeants, 6; corporals, 4; and privates, 282.

Forty of the above number surrendered or were apprehended.

The probable causes reported by boards of survey in 185 cases are: Dissatisfaction, 49; to get higher wages, 15; general worthlessness and dissipation, 11; to escape trial, 1; and tramps when enlisted, 11.

Number of desertions within six months of enlistment, 145; in first year of service, 212; second year of service, 43; third year of service, 17; fourth year of service, 7; and after serving one or more terms 14. Tried by court-martial: Once, 38; twice, 21; three or more times, 23; and never tried, 211.

Two hundred men deserted within ten days after date of payment.

The large number of desertions within six months after joining companies seems to afford proof for the assertion that more than one-third of the deserters enlisted during the winter months, merely to obtain food, shelter, raiment, and transportation from our crowded cities to a new field. The great demand for labor on railroads and the absolute security from arrest after crossing the Rio Grande, and almost within sight of the military post, is seemingly and irremediable cause.

ENGINEER CORPS.

Total number of deserters (Willets Point, N. Y.), 13.

No cause is assigned in 8 cases; 3 are reported due to intemperance, and 2 to the men having married prior to enlistment.

Suggestion is made that more care be exercised to prevent enlistment of intemperate or married men.

MOUNTED RECRUITING SERVICE, JEFFERSON BARRACKS, MISSOURI.

The principal causes of desertion are ascribed to: 1st, dissatisfaction with army life and its restraints; 2d, to the notorious unhealthiness of the station; and 3d, to a desire to secure transportation to the far west.

The remedy suggested is a more rigorous punishment for desertion.

GENERAL RECRUITING SERVICE, NEW YORK CITY.

The superintendent is unable to account for desertion on grounds satisfactory to himself, except upon the hypothesis that many men enlist simply with a view to obtaining temporary relief.

In seeking the remedies for this cancerous evil, it must be remembered that desertion, like other crimes, can never be totally eradicated, but may and should be reduced to a minimum. Desertion, by military law, is regarded as one of the most heinous crimes that soldiers can commit, and, in time of war, death is the penalty; unfortunately, however, it is not sufficiently so considered in time of peace, either by the civil law, the people at large, or the soldiers themselves. One great cause of desertion is that the men are taught to believe it not a crime but, at most, a breach of contract, which can be terminated at pleasure or whenever a real or supposed grievance presents itself to their minds. This pernicious doctrine—ignoring the sanctity of the oath taken at enlistment—pervades almost the entire Army.

Disappointment at realistic military life; restlessness under its restraints; desire to obtain higher wages as laborers; the large amount of clothing charged to recruits during the first year of service, especially at depots, from date of enlistment to the time of joining their commands, for which they have to pay before receiving any money from the Government, are some of the principal causes of desertion, and, lastly, but not the least in importance, the fact that, from a deplorable thoughtlessness, company commanders do not always reserve into their hands the active management and supervision of their company, and delegate to non-commissioned officers powers of control that should only be exercised by themselves. In this connection I beg to recommend

that stringent orders be issued—preferably in the form of a regulation—prohibiting the confinement of men in the guard-house by non-commissioned officers except for the offense of disturbance in quarters. No man should be confined, particularly those guilty only of minor offenses, until after full inquiry has been made by the company or the post commander into the cause of offense. At many of the posts men who have offended trivially are confined in the prison-room occupied by general prisoners — the worst element in the Army. This, in my judgment, should be absolutely prohibited.

There is scarcely a doubt that the absence of captains from their companies, for long periods leads to much discontent on the part of the men. There are, at present, one hundred and two captains of the line absent from their appropriate commands (thirty-one from the cavalry, eight from the artillery, and sixty-three from the infantry), or nearly twenty-four per cent. of the whole number of line officers of that grade.

In addition to the above important recommendation on the subject of the exercise of arbitrary power on the part of non-commissioned officers, I beg to suggest:

First. The first term of service to be fixed at three years. Over one-half of the desertions take place during the first year or eighteen months of service. Necessity forces the assignment of recruits to regiments after too short a stay at the depot to determine their fitness for the Army. Inaptness for military life, discontent, homesickness, &c., render many men restless at the prospect of five long years of a service for which they are not fitted, and induces them to seek relief through desertion, while, could they realize that but a comparatively short time is to elapse before their discharge, they would hesitate to forfeit the advantages (retained pay, transportation, &c.) accruing to them at the end of their term of service.

Second. Bi-monthly settlement of clothing. The present system, although in accordance with existing law, works great hardship to the recruit or young soldier, and is, undoubtedly, a fruitful cause of desertion. The cost, about fifty dollars, of the first outfit furnished a recruit should be proportionally deducted each month, a final settlement being made at the end of the year.

Third. Reduction of the amount of manual labor imposed on the men. This labor, of course, is not meant to include purely military duty.

While—underlying all grievances—the cause of desertion is primarily to be found in the low moral standard of offenders, I believe the above recommendations, looking to the removal of the causes of discontent, will, if carried out, prove of much efficacy in checking the commission of this crime.

EDUCATION IN THE ARMY.

This subject is one of deep solicitude to all interested in the furtherance of the best interests of the service, whether viewing its immediate benefits to the ranks or its future advantageous results when the men who now fill the Army are restored to the full exercise of the privileges of citizens. Reserving the expression of my views on the subject at present, I have the honor to submit a synopsis of the several reports received during the past year.

DEPARTMENT OF ARIZONA.

Number of post schools, 6. School attendance: Enlisted men, 38: children of officers, 10; children of enlisted men, 17; and children of civilians, 11.

There was no neglect on the part of post commanders, but the numerous calls for troops for field service have practically closed the schools during the greater part of the year.

DEPARTMENT OF CALIFORNIA.

Number of post schools, 11; average strength of garrisons. 848; and average number of children over five years, 112. School attendance: Enlisted men, 20; and children of officers, 41.

Teachers, school-rooms, and school-books are provided at all posts in the department; school-rooms and books are sufficient and in good order; no neglect appears on the part of post commanders to take proper interest in this important part of their duties.

DEPARTMENT OF DAKOTA.

Number of post schools, 21; average strength of garrisons, 4,041; and number of children over five years, 331. School attendance: Enlisted men, 183; children of officers, 63; children of enlisted men, 147; and children of civilians, 86.

The school-houses and school-books are reported, generally, in good condition.

The schools for enlisted men have not prospered during the past years as much as was hoped, partly owing to lack of good teachers and in part from the amount of work required from the men under reduced appropriations. The inadequacy of the lights allowed for the evening school for enlisted men is a serious drawback which should be remedied.

DEPARTMENT OF THE EAST.

Number of post schools, 15.

The progress, as a rule, has not been great, owing to a general want of competent teachers, and attendance being optional.

DEPARTMENT OF THE MISSOURI.

Number of post schools, 21; average strength of garrisons, 3,789; and average number of children over five years, 342. School attendance: Enlisted men, 214; children of officers, 42; children of enlisted men, 127; and children of civilians, 57.

The condition of school-buildings and school-books is reported as generally good; at some few points there has been no school-building, but measures have been taken which will supply the deficiency; there has been no lack of interest on the part of post commanders; in several cases since the close of the last fiscal year schools have been discontinued, owing to the impossibility of paying teachers the *per diem* allowance from the greatly reduced appropriations for "incidental expenses."

DEPARTMENT OF THE PLATTE.

Average strength of garrisons, 2,094. School attendance: Enlisted men, 85; children of officers, 35; and children of enlisted men, 96.

The mode of selecting teachers is considered defective; they should have settled appropriate rank, and, in order to impress intellectual superiority upon their scholars, should know more than they are actu-

ally called upon to impart. Attendance at schools should be made compulsory; many officers find it difficult to draw the line between persuasion and compulsion, advice and order.

DEPARTMENT OF THE SOUTH.

Number of post schools, 5. School attendance: Enlisted men, 23; and children, 23.

At small posts the time of the men is so fully occupied that they really have little or no time for school, even if they desired to attend; but it has been found exceptional for an old or even middle-aged soldier to have a desire to study. Considers it a waste of time and money to attempt to maintain schools at posts garrisoned by less than four companies.

DEPARTMENT OF TEXAS.

Number of post schools, 10; average strength of garrisons, 2,040; and average number of children over five years, 263. School attendance: Enlisted men, 99; children of officers, 56; children of enlisted men, 112; and children of civilians, 74.

The school-houses and school-books are reported in good condition. Renews views, heretofore submitted, that under the present system but few really competent teachers can be secured; to become willing pupils the men must recognize the competency of their instructors; attendance should be compulsory; the teachers to be provided by future legislation should be for service at any post where their services may be needed, possess adequate rank, and ought not to form part of a regimental organization; to secure the best possible results, the general charge should rest with the Adjutant-General and his assistants at department headquarters, simplicity of organization being a powerful factor of success; finally, the instruction of enlisted men should be viewed as a military duty, and the school hours be during the period of the day allotted to the performance of duties—after retreat, as now, is not a time when soldiers are inclined to attend school.

The partial failure of the scheme of education in the Army, as evidenced by the comparatively small number of men availing themselves of the advantages offered them, is, I am satisfied, owing in a great measure to faultiness of the present system. Its tendency, as I had the honor to state in my last report, is to create a bureau of military education which is subject to grave objections, and, in other respects, serious defects exist destructive of the hope of reasonable success.

The instruction should be beyond the alphabetical range; attendance at the school must be made part of the military duty of the soldier, and, as a necessary sequence, the hours fixed should be during the time of the day allotted to the performance of duties. Men should be made to realize that in addition to soldierly bearing, full knowledge of military duty and ready obedience and ability in its performance, education will prove an important factor in determining their fitness for appointment to the honorable and responsible position of a non-commissioned officer. On the other hand, teachers must be fully fitted for their position, and combine with the possession of knowledge the capacity to impart it. Their services being for the benefit of the whole Army, they cannot with propriety be members of a company or a regiment, and they must be given suitable rank to insure attention and respect. Soldiers will be slow to obey or respect a teacher whose position in quarters is possibly inferior to theirs, and it is demoralizing in the extreme when they find that their voluntary studies must be relin-

quished for a time because their instructor (superior to them in acquired knowledge only) is undergoing merited punishment in the guard-house, possibly for drunkenness.

I beg to renew my recommendation that the inspection of the schools be made part of the duties devolving on officers of the Inspector-General's Department, and that these inspections be made special.

RECRUITING SERVICE.

On October 1, 1882, recruiting rendezvous were in operation at the following points: Four in New York City; two in each of the cities of Philadelphia, Baltimore, Chicago, Cincinnati, and Saint Louis; and one, in each, at Boston, Providence (R. I.), Albany, Buffalo, Pittsburgh, Cleveland, Indianapolis, Springfield (Ill.), Detroit, Milwaukee, Davenport (Iowa), and Washington.

In February, 1883, a rendezvous was opened at Harrisburg, Pa., and in May, 1883, one at Kansas City, Mo.

In April, 1883, the rendezvous at Davenport, Iowa, and Springfield, Ill., were closed and replaced by rendezvous at Rochester, N. Y., and Louisville, Ky.

The rendezvous at Milwaukee, Wis., was closed in April, 1883; it was re-established in August, 1883.

Kansas City, Mo., not proving to be a productive station, the rendezvous there has been recently closed.

During the month of September, 1883, a branch from the Albany rendezvous was opened at Troy, N. Y., and also a branch from one of the Philadelphia rendezvous at Camden, N. J.

During the greater part of the year the recruiting offices in the cities where only one rendezvous has been in operation have been making enlistments for both the general and mounted service, but in September, 1883, recruiting for the mounted service by officers of the general service (except at Washington, D. C.) was restricted to the re-enlistment of applicants presenting themselves within one month from date of discharge from prior service.

Recruiting has also been carried on without expense to the recruiting fund, in all the departments embraced in the Military Divisions of the Missouri and the Pacific by officers stationed at military posts, under the supervision of the assistant adjutant-generals at the headquarters of the several departments. In the Military Division of the Atlantic regimental recruiting has been actively carried on by recruiting officers at the several posts designated by the regimental commanders.

Every effort was made during the entire fiscal year ending June 30, 1883, to obtain sufficient men to fill the Army to its authorized strength, but notwithstanding these efforts the total enlisted strength of the Army on that date was only 22,851, or 2,149 less than the authorized number.

Since the commencement of the present fiscal year recruiting has progressed satisfactorily.

The two colored regiments of infantry having their proper complement of men, recruiting for them has been recently suspended, except in the cases of applicants who, having honorably served one enlistment (or more), present themselves for re-enlistment within one month from date of discharge.

The total number of enlistments made during the fiscal year ending June 30, 1883, was 8,998 (not including the Signal Corps). Of these, 6,668 were made by officers of the general and mounted recruiting

service, and 1,263 by department and engineer recruiting officers. The nativity and occupation of these accepted recruits (7,931 in number) are exhibited in detail in the table marked K, as well as the various causes leading to the rejection of a large number of applicants for enlistment. The remaining enlistments (1,067 in number) were made by regimental recruiting officers, commanding officers of detachments, &c.

The total number of enlistments made during the fiscal year ending June 30, 1883, is, as stated above, 8,998; of the 7,931 accepted recruits, 4,838 were native born, 3,093 of foreign birth, 6,461 white, and 470 colored. The large number of men presenting themselves for enlistment (19,738), who were rejected on account of mental or physical disqualification, evidences that the officers detailed on this important and delicate duty are fully alive to the interests intrusted to their care.

Many men are annually lost to the Army by being sent to regiments too soon after enlistment to acquire any but the most rudimentary knowledge of the service, its duties, and restraints. A measure was introduced in the last Congress providing the only remedy to this positive and costly evil. The Committee on Military Affairs adopted my recommendation that 1,000 men, in excess of the prescribed strength of the Army, be allowed for thorough instruction at the recruiting depots, but the bill introduced in Congress for that purpose failed to become a law from causes extraneous to its merits.

Fully convinced of the advantages that would accrue from the thorough instruction of recruits before their assignment to military organizations, I attempted to carry out the scheme, hampered on one side, however, by the absolute necessity of keeping within the legal limit of the strength of the Army, and on the other by the pressing demands for recruits to fill up depleted commands. The notorious unhealthiness of one of the main depots, added to the above reasons, forced, eventually, the abandonment of a plan which, I am satisfied, is the only true remedy to the evil complained of, by providing efficient additions to the ranks and saving the Government the heavy expense of transporting to numerous distant points men whose entire lack of necessary qualities and aptitude renders them an absolute burden to the Army.

Respectfully submitted.

R. C. DRUM,
Adjutant-General.

REPORT OF THE INSPECTOR-GENERAL.

HEADQUARTERS OF THE ARMY,
INSPECTOR-GENERAL'S OFFICE,
Washington, D. C., October 27, 1883.

SIR: I have the honor to submit, for the information of the honorable Secretary of War and the General of the Army, the following report of the operations of the Inspector-General's Department.

The number, rank, and station of the officers of this department remain the same as at the date of my last annual report.

The undersigned has continued in charge of the office at these headquarters, performing the various duties pertaining thereto, and has also made reports on the special subjects which have been referred to this office by the Secretary of War.

Inspector-General Nelson H. Davis has remained on duty as inspector-general of the Military Division of the Missouri. He has made such

investigations and inspections, under the orders of the Lieutenant-General commanding, as the necessities of the service required; and has also, under directions from the Secretary of War, made the quarterly inspections of the Leavenworth Military Prison, provided for by section 1348, Revised Statutes.

Assistant Inspector-General Roger Jones has continued on duty as inspector-general of the Military Division of the Atlantic, and has been actively engaged in making investigations and inspections, under the orders of the major-general commanding.

Assistant Inspector-General Absalom Baird has continued on duty in this office as my assistant. In addition to his regular current duties, he has examined the money accounts of various disbursing officers of the Army stationed in this city, Baltimore, Pittsburgh, Harrisburg, and Norfolk, and has also made several investigations under orders of the Secretary of War.

Assistant Inspector-General Joseph C. Breckinridge has been on duty as inspector-general of the Military Division of the Pacific. In addition to his regular duties at those headquarters, he has made and completed a careful inspection of all the posts in the Department of the Columbia, on which duty he was engaged, under orders from the division commander, at the date of my last annual report.

It will be seen that the officers of the Inspector-General's Department are actively engaged at these headquarters, and at the headquarters of the three military divisions, leaving none of them available for assignment to the eight departments; and it has been deemed necessary to continue on duty as acting assistant inspector-generals the line officers specified below.

The law approved June 23, 1874, reorganizing the several staff corps of the Army, after enumerating the number and rank of officers of the Inspector-General's Department, says:

> The Secretary of War may, in addition, detail officers of the line, not to exceed four, to act as assistant inspectors-general: *Provided*, That officers of the line detailed as acting inspectors-general shall have all the allowances of cavalry officers of their respective grades. (Supplement to Revised Statutes, Vol. 1, page 100.)

The four officers detailed under this act, and the orders so detailing them, are as follows:

Maj. John J. Coppinger, Tenth Infantry, to headquarters Department of the Missouri, by Special Orders No. 162, Adjutant-General's Office, July 12, 1879.

Lieut. Col. Edwin C. Mason, Fourth Infantry, to headquarters Department of the Platte, by Special Orders No. 191, Adjutant-General's Office, August 18, 1882.

Capt. Thomas Ward, First Artillery, to headquarters Department of the East, by Special Orders No. 267, Adjutant-General's Office, November 15, 1882.

Capt. Robert P. Hughes, Third Infantry, to headquarters Department of Dakota, by Special Orders No. 61, Adjutant-General's Office, March 15, 1883.

At the four remaining departments, officers have been placed in charge of the acting assistant inspector-general's office, by authority of the respective department commanders, as follows:

Department of Arizona: Maj. Abraham K. Arnold, Sixth Cavalry.

Department of the South: Maj. Francis L. Guenther, Second Artillery.

Department of Texas: Capt. George B. Russell, Ninth Infantry.

Department of the Columbia: Maj. Oliver D. Greene, assistant adjutant-general.

All the above-named officers have been busily engaged in inspecting the garrisoned posts within their respective departments, examining the money accounts of disbursing officers of the Army, and performing, under the orders of the department commanders, the duties pertaining to the inspection branch of the service, all of which have been executed with a zeal and fidelity worthy of commendation.

In compliance with the requirements of the act of Congress approved April 20, 1874, inspections have been made of the accounts of all officers of the Army who have disbursed public money during the year. The funds received and expended, with balances reported due to the United States, have been compared and verified by official statements from the Treasury and designated depositories, and by careful examination of the check-books, vouchers, &c., of the disbursing officers.

These examinations show that the public funds appropriated for Army purposes have generally been disbursed properly. One exception is noted, where official action has been taken and the offender convicted and sentenced to the penitentiary.

The reports of all these inspections are submitted herewith, for transmittal to Congress, as required by the law above referred to.

Thorough inspections have been made, during the past year, of nearly all the garrisoned posts in the United States, by regular and acting officers of this department, and, in compliance with paragraph 1327, Army Regulations, the commanding officers of the several posts have rendered reports of inspection of their respective commands. These reports, after receiving the notes and remarks of local and superior commanders in regard to any action taken or required, have been forwarded to this office. Here these reports receive a careful scrutiny, and extracts therefrom are furnished to the proper authorities of all subjects demanding further action.

From an examination of the annual reports of the division and department inspectors, as well as of the inspection reports above mentioned, I am enabled to present the following facts concerning the condition of the military establishment:

The business of the several supply departments has been excellently administered, the supplies being ample and of good quality. The health of the troops has been generally good. Improvements have been made and are contemplated in clothing for the soldier, under the able administration of the Quartermaster's Department, which has also maintained good and sufficient transportation for the Army. As regards discipline and military bearing of the troops, a steady improvement over former years is shown, and the same remark also applies to target practice.

Military instruction continues to be seriously interfered with by the almost constant employment of troops at fatigue and mechanical labor.

It appears that the post schools have not been a success generally; few enlisted men attend, but the attendance of children has been fair. Early in this fiscal year, many or most of the post schools were closed for want of money for compensation of teachers.

At the Leavenworth Military Prison the condition of the buildings, hospital, grounds, &c., is good; and the management, in respect to discipline, police, messing, work, and humane and just punishment, is most excellent.

Inspector-General N. H. Davis, in his annual report, thus sums up the condition of the *personnel* and *matériel* of the service in the Division of the Missouri:

The health, police, and discipline are good. Instruction in drills and target practice has generally been regularly given with satisfactory improvement; it has to a great

extent been very marked in target and skirmish practice, thus increasing much the efficiency of the troops as combatants upon the field of battle. The draft upon the troops, in some commands, for detached service, and for work as laborers and mechanics, has materially interfered with and interrupted the discharge of their military duties. The percentage on extra and daily duty at many posts is large.

The public buildings are in as good condition as the circumstances of the service and the means available therefor permit. New buildings are needed, old ones want repairing, and others in use are reported unfit for occupation.

The concentration of the troops into larger commands at a less number of military posts, with good and sufficient shelter to properly cover them and protect the public property, will obviate the necessity of going on from year to year patching dilapidated buildings, erecting temporary structures, and improvising mongrel habitations of shanty and canvas with the labor of our soldiers, and result in economy to and efficiency in the military service; it will improve the *esprit de corps* and promote the well-being of the Army. There are in this division sixty-nine posts and sub-posts at which the troops are distributed.

On the subject of desertion, Colonel Davis also remarks as follows:

As the result of considerable investigation of this subject, it appears that the prime cause of so much desertion in our Army is the employment of so many soldiers as laborers and mechanics, and this in addition to the military service required of them: it is work and drill, guard and detached service, with too little recreation and time to themselves; they work frequently side by side with civilians at the same kind of labor for less pay, the latter having the time to themselves out of the eight hours daily work. And the idea prevails that this compulsory labor is a breach of the contract with the Government when the man enlisted; objection is made to both soldiering and working, exclusive of the ordinary garrison fatigue duty, at the same time.

Other causes may be, the occasional enlistment of men who intend to desert, the sudden change of life of the recruit in the matter of restraint, duties, and punishments to which he is subjected, the temptations of better pay and greater freedom sometimes presented to the soldier.

If the condition of the military service and causes for desertion above given are correctly reported, and the changed condition in the life of the people from whom the Army is recruited that have taken place in the past thirty or forty years are recognized, the remedies for desertion, in a great measure, would, it seems, naturally suggest themselves.

It is suggested that some of the remedies referred to are:

That there should be a provision of law by which the recruit should be retained at a depot and carefully instructed in all the duties of a soldier, under the command of a judicious officer, before he joins his company; for which purpose authority should exist to enlist, say, 1,000 men in excess of the legalized active strength of the Army.

That there should be larger commands, better quartered, with more facilities for social recreations and amusements, mental and physical.

That the pay of privates, corporals, sergeants, and first sergeants of the line should be increased to, say, $15, $20, $25, and $30 respectively.

That the practice of employing soldiers at constant labor discontinue, and the troops, both officers and men, be restricted to the duties which more properly pertain to their profession.

The Army should hold that high position of honor, trust, and efficiency, that it will command the respect and support of the people. A republic should have intelligent, educated, and patriotic soldiers. It must keep abreast with the progress of the age. The smaller the Army, the more necessity for increasing its efficiency.

Our country of fifty millions of people, with their vast interests, cannot afford to dispense with an efficient military organization, if the people would have that protection of life and property that they expect and may rightfully claim from the Government. It is poor economy to save a few dollars at the expense of efficiency; but this work is not, in the end, economy. Let us have less of the pick and shovel, and more of the saber and musket.

Maj. J. J. Coppinger, acting assistant inspector-general, Department of the Missouri, furnishes the following views on the same subject:

I am of opinion that, as a rule, company commanders treat their men with much consideration and kindness. Their comfort is much dependent on the good conduct and well-being of their men. Self-interest alone would prompt kind treatment; the old "knock down and drag out" school has passed away. Sergeants are perhaps occasionally injudiciously harsh, but cause for desertion need not be looked for in direct ill treatment by company commanders.

Of course we must expect some desertions, but the number of ours is, I think, greatly increased by the vast amount of labor imposed on our men, labor which they regard as breach of contract. They enlist as soldiers; they are too often worked as laborers,

With the restraint of the first, they do the work of the latter, road-making, ditching, building, teaming, extra-duty work, without extra-duty pay. Working, perhaps, side by side with some authorized citizen mechanic receiving $60 per month and a ration, and this often near mining sections on the frontier, where laborers command $2 to $3 per day, mechanics $4, the temptation is frequently too strong for them. I would give them extra-duty pay for extra-duty work.

Our system of pay, too, is injudicious. Payments running two months beget thriftless lavishness; lavishness begets drunkenness; drunkenness begets desertion. Would it not be better to allow the men a small sum for pocket money once a week, and hold the balance of their pay until expiration of term of service? This would afford at once an inducement to good conduct, as well as a sum worth investment for their future benefit, in lieu of the two-monthly driblets, too often squandered in drinking saloons, to the prejudice of discipline. Company commanders can easily carry out this if authorized, without injury to the pay corps. The matter is at least worth some consideration.

Attention is invited to the views of Assistant Inspector-General J. C. Breckinridge, on the subject of the artillery arm of the service, as follows:

The *personnel* of the artillery arm is very specially affected by the changes of this year. Officers who have been its ornaments for years leave it for the retired list, with a sense of scant reward for services which have given them more than a national reputation.

The five regiments of artillery seem a sufficient force to be entitled to a brigadier-general, and every artillerist is aware how much their service would be improved if a brigadier-general were given a special and direct supervision over them. Greater dash and aggressiveness were never more demanded of the artillery than now. A nation whose young men are not seasoned soldiers will, when driven into civilized warfare, find its artillery of the utmost importance as a "stable element in battle."

Our light or horse batteries have no commisioned officers permanently attached to them now, and so our "company father" is but a step-father at best. There is no field officer in command with us, nor a first and second captain, as in the English horse artillery, and pity 'tis 'tis true.

I desire again to call attention to the subject of increasing the number of officers in this department. The bills which were introduced in both houses of Congress last session, providing for such increase, failed to become a law, owing, in a great measure, to the shortness of the session.

This increase has been approved and recommended by the honorable Secretary of War and the General of the Army. I can see no reason why this measure should meet with objection from any source, and I recommend that the matter be again properly presented to Congress; and I think the members will see and appreciate the importance and usefulness of the Inspector-General's Department, and the necessity for more officers therein.

In my annual report of last year I made the following remarks, and the importance of this subject, in my opinion, justifies me in quoting them at this time:

The department now consists (as the law is construed) of five officers only. Eight officers, in addition, are detailed from the line for duty therein; the services of this number being indispensable for the proper performance of the duties of the department. Could it be increased by five officers, selected from the Army solely for their known gentlemanly and soldierly qualities, the department would be made independent, self-reliant, and efficient, and would be rendered in the highest degree useful and beneficial to the military service.

The detail of the eight officers for duty in the department deprives the regiments to which they belong of their services, and on many occasions when much needed.

It appears to me no more than reasonable and wise that the department should be composed of a sufficient number of efficient and energetic officers for the full and proper performance of its duties; and that regiments should not be deprived of their most valuable officers by details that detach them permanently from their legitimate duties with their regiments.

The following extracts from annual reports of inspecting officers show

the necessity for some permanent arrangement for clerks for those officers. From that of Inspector-General Davis:

The need of more and suitable clerical aid in the discharge of their necessary official duties is reported by the department inspectors. But for the clerical assistance furnished my office by the courtesy of the chief quartermaster of the division, it would have been impossible for me personally to have performed the clerical work demanded by the discharge of my official duties. No clerk is allowed me. In the discharge of their official duties inspectors report upon the *personnel* as well as the *materiel* of the Army; great care and exactness is required of them; they have many papers to examine and much writing that cannot be delegated in the first instance, but copies of which have to be made. At present there is an unjust discrimination made in the Army against inspecting officers in regard to the proper and necessary clerical assistance. Appropriations, either directly or indirectly, as incidental expenses for the Quartermaster's Department, should be made to supply this want.

From that of Assistant Inspector-General J. C. Breckinridge:

The necessity for a clerk to each officer of the Inspector-General's Department is too evident to require more than mention to any one acquainted with the service and honestly desiring its good. This necessity has probably been admitted always. But now that the duties of the inspectors-general have been so greatly extended, and been made, if possible, more delicate and exacting by the examination of every variety of accounts in addition to their former specially military duties, it becomes more and more incumbent that this clerk shall be authorized, and that his position be dignified to the utmost as one of responsibility and trust. Is there any other officer in the service, of equal rank or performing such important duties, who is left so illy supplied with clerical assistance as the inspectors-general? When the inspector-general is absent on duty, who is the authorized custodian of his office records? I am sure that this matter has already received attention, and as there are but a few inspectors-general in the entire Army, it is only reasonable to expect that they may be as well supplied as others.

From that of Maj. J. J. Coppinger, acting assistant inspector-general:

I would earnestly invite attention to the necessity for a clerk, properly enlisted or hired, for the office of the acting assistant inspector-general here. I am allowed, by courtesy, the service of one clerk to do the work of the office of instructor of musketry as well as the inspector's; a force totally inadequate to deal with the mass of papers which are piled up on him, which are already sadly in arrears.

All other branches of the staff of the Army are provided in some way with the necessary clerical assistance, but for the officers of the Inspector-General's Department no provision whatever is made. The officers of this department are gentlemen of rank and many years' service, and there is much tedious clerical work that such officers should not be required to perform individually. Copying reports of inspections and investigations, keeping up the records of an office, &c., is properly the work of a clerk, and in every inspector's office there is much of this kind of labor to be performed.

I urgently recommend that some steps be taken to place the Inspector-General's Department on an equal footing, in this respect, with other staff departments.

Respectfully submitted.

D. B. SACKET,
Brigadier and Inspector-General, U. S. A.

The ADJUTANT-GENERAL, UNITED STATES ARMY.

REPORT OF LIEUTENANT-GENERAL SHERIDAN.

HEADQUARTERS MILITARY DIVISION OF THE MISSOURI,
Chicago, Ill., October 17, 1883.

GENERAL: I have the honor to submit, for the information of the General of the Army, this, my annual report, accompanied by the reports of the department commanders, and the report of the commanding officer District of New Mexico. These reports give in detail the operations of the troops for the past year, and contain so many suggestions and recommendations pertinent to the discipline and administration of this command, that I am left but little to say beyond what they have presented. There have been many difficulties in the division during the past year, but none of a serious nature. The outlook is favorable for a peaceful condition for the coming one.

Since my last annual report, dated October 20, 1882, no change has taken place in the organization of the division, which consists of the Departments of Dakota, the Platte, the Missouri and Texas.

The Department of Dakota is commanded by Brig. Gen. Alfred H. Terry, and comprises the State of Minnesota and the Territories of Dakota and Montana. It is garrisoned by nineteen permanent posts and a camp at Poplar River, Montana.

The Department of the Platte is commanded by Brig. Gen. O. O. Howard, and comprises the States of Iowa and Nebraska, the Territories of Wyoming and Utah, and a portion of Idaho. It contains eleven permanent posts.

The Department of the Missouri is commanded by Maj. Gen. John Pope, and comprises the States of Illinois, Missouri, Kansas, and Colorado, the Indian Territory and the Territory of New Mexico, together with the posts of Fort Elliott and Fort Bliss, Tex. The department is garrisoned by twenty permanent posts, and a camp on the Uncompahgre River, in Colorado.

The Department of Texas consists of the State of Texas, and is commanded by Brig. Gen. C. C. Augur. The garrisons include eight permanent posts, one of which—Fort Stockton—has been ordered abandoned, and seven camps and sub-posts along the southwestern frontier.

To garrison the military posts in this division, there are now seven regiments of cavalry, nineteen regiments of infantry, four batteries of light artillery, and 154 Indian scouts, aggregating 14,343 officers and men, distributed as follows:

Department of Dakota—two regiments of cavalry (less one company at the school of application at Fort Leavenworth), 1,330; seven regiments of infantry (less one company at the school of application at Fort Leavenworth), 3,039; one battery of light artillery, 63; 59 Indian scouts; total, 4,491.

Department of the Platte—one regiment of cavalry, 765; four regiments and six companies of infantry (less one company at the school of application at Fort Leavenworth), 2,029; one battery of light artillery, 69; 4 Indian scouts; total, 2,867.

Department of the Missouri—two regiments and three troops of cavalry (three of which comprise the garrison of the school at Leavenworth), 1,676; five regiments and seven companies of infantry (three of which comprise the garrison of the school at Leavenworth), 2,702; one battery of light artillery, 64; and 51 Indian scouts. Stationed at the school of application for cavalry and infantry, at Fort Leavenworth,

Kansas—besides companies belonging to other departments of this division, viz, Troops G, Seventh Cavalry, 57, and M, Eighth Cavalry, 57; Companies A, Fourth Infantry, 49, and G, Eleventh Infantry, 51; there are also one troop of the Third Cavalry and one company of the First Infantry, both of which belong to regiments transferred in 1882 to the Division of the Pacific. Total strength of troops in the Department of the Missouri, 4,493; and in addition to which, one lieutenant from each of the cavalry and infantry regiments of the Army is detailed for instruction at the school.

Department of Texas—two regiments of cavalry (less one company at the school of application at Fort Leavenworth), 1,508; two regiments of infantry, 891; one battery of light artillery, 53; and 40 Indian scouts; total, 2,492.

The troops in the Department of Dakota have been very active in controlling incursions from Canadian Indians and half-breeds who cross the boundary line for hunting, trading, or horse-stealing purposes. They have been met each time by the troops and arrested or driven over the border, with the loss, occasionally, of some of their property, and when they had erected tents they were burned. I am led to believe that in the course of time these predatory incursions will cease.

The Northern Pacific Railroad has been completed, which now gives to that large territorial command a speedy means of transportation from its eastern to its western boundary lines. The post of Fort Stevenson and the camp at Bad Lands were abandoned during the year, having fulfilled all the conditions for which they were established.

Military affairs in the Department of the Platte have been peaceful during the past year. The posts of Fort Hall and Fort Cameron were abandoned, as it was thought that the settlements about them had grown so strong that the population needed no further protection. Forts McKinney, Laramie, Robinson, and Niobrara are the picket posts in this department; they are near the Indians and can be rapidly re-enforced from the stations along the Union Pacific Railroad.

Fort McKinney covers the extensive cattle range east of the Big Horn Mountains, including Powder River. Forts Laramie and Robinson are sentinels over the large collection of Indians at the Pine Ridge Agency, and Fort Niobrara has the same bearing on the Rosebud Agency.

The recommendations of Captain Adams on re-enlistments, presented in the report from the Department of the Platte, are worthy of careful consideration.

In the Department of the Missouri to watch the Navajoes and Mescaleros has required considerable activity from the troops, and last fall the raid of the Apaches in Arizona was followed by the operations of a command, under Lieut. Col. George A. Forsyth, in the southwestern corner of New Mexico, to protect and guard the settlers in that section and in Arizona on the adjacent border, the details of which will be found, as well as all other movements of troops in the department, fully set forth in the department commander's report.

The ugly difficulty in the Creek Nation, which threatened bloodshed, was quieted by sending troops to Ockmulgee, where subsequently commissioners came and settled on terms of peace to which both sides agreed. We have at the town of Ockmulgee a small force, and will for some time be obliged to maintain it at that point in the Creek Nation.

The school of application for infantry and cavalry, at Fort Leavenworth, has succeeded admirably, and its value as a good practical school will soon be felt in the Army. I fully indorse the recommendations of General Pope about the school.

There has been unusual quiet in the Department of Texas, and the use of troops for protection against Indians will soon cease, but new interests are growing up by the construction of new lines of railroads into Mexico, and the International line of the Rio Grande does now and will continue to demand our attention. The post of Fort Duncan and a few minor camps have been given up during the past year.

In reference to desertion, in my opinion, the excess beyond the ordinary ratio comes from the mining, railroad, cattle, and agricultural development of what may be called the frontier. Many young men in the Eastern and Middle States, wanting to better their condition by getting out to the frontier, and not having money enough to reach this Eldorado, enlist in the Army for the purpose of getting there at the Government's expense. That is their real object. They get out to military posts in this way, and to make it more easy for their consciences in deserting their flag, they complain of the ration, the work they have to do, and then desert, thus accomplishing the object they had in view when they enlisted. The communities to which they go are in sympathy with this class, shield them, and do not consider it a crime to desert. It was the same in California in the old mining days, men enlisting in the East with no other object in view than to get out to the Pacific coast, deserting on their arrival there and going to the mines.

For many years we have been obliged to keep a large number of small posts in the Indian country, which have greatly added to the cost of the service. The extension of railroads in all directions over the vast region between the Missouri River and the Rocky Mountains now affords an opportunity for concentration, and for some time the process of abandoning these small posts has been going on. In consequence the standard of discipline and efficiency is increased and economical results are anticipated.

Officers and men throughout the division have taken the deepest interest in marksmanship, and the improvement shown by the reports is most gratifying. I cannot too earnestly recommend a continuance of the allowance of ammunition for target practice, and the liberal expenditure of money to carry out the prescribed rifle competitions will meet with the best results.

Generals Pope, Howard, Terry, and Augur have ably and economically administered their respective departments, and I herewith submit their annual reports for details of information.

The officers of the supply departments throughout the division are entitled to credit for efficiency. The important branches of the service which are in their control have been economically administered during the year, and the health and comfort of the officers and men thereby improved.

I have the honor to be, general, very respectfully, your obedient servant,

P. H. SHERIDAN,
Lieutenant-General Commanding.

Brig. Gen. R. C. DRUM,
Adjutant-General, United States Army, Washington, D. C.

REPORT OF MAJOR-GENERAL HANCOCK.

HEADQUARTERS MILITARY DIVISION OF THE ATLANTIC,
Governor's Island, New York, October 8, 1883.

SIR: In obedience to the instructions contained in your letters of September 19 and September 29, 1883, I have the honor to submit for the information of the General of the Army the following report of operations within the Military Division of the Atlantic during the past year:

The geographical boundaries of the division are the same as at date of last report. It is divided into two departments, East and South, the former being under my immediate command, with headquarters at Governor's Island, New York. The Department of the South was, until the 14th of September, 1883, under command of Col. Henry J. Hunt, Fifth United States Artillery. Upon the date mentioned Colonel Hunt was retired from active service, agreeably to the provisions of section 1 of the act of Congress approved June 30, 1882, and under the instructions of the honorable Secretary of War the Department of the South was placed temporarily under my immediate command, and it so remains at this date. I therefore, at the present time, immediately command the Division of the Atlantic as well as its two geographical departments.

The aggregate of troops serving in the division on the 30th of September, 1883, was, according to the last returns, as follows:

	Commissioned officers.	Enlisted men
Headquarters Middle Division of the Atlantic	8	14
Department of the East	270	2,102
Department of the South	73	475
Total	351	2,591

On the 30th of September, 1882, the strength of the division in troops was 348 officers and 2,669 enlisted men.

There have been but few movements of troops within the division during the past year; none to and but one from it. At the date of my last report, October 21, 1882, the garrisons of Washington Barracks, D. C., and Fort McHenry, Md., were in summer camp at Gaithersburg, Md. After a profitable season of instruction in the military duties incident to camp life, the troops, on the 2nd of November, 1882, broke camp, and, under the command of Col. R. B. Ayres, Second United States Artillery, marched to their permanent stations by a selected route, calculated to benefit men and horses, and somewhat inure them to the requirements of active service in campaign. This year again, in June last, the troops from Washington Barracks and Fort McHenry, Md., marched into camp at Gaithersburg, and still remain there, under the command of Colonel Ayres. The encampment, however, will be terminated in the course of a few days, probably this week. A return march by way of certain historical battle grounds in Virginia and Pennsylvania was projected by Colonel Ayres, but the necessary transportation for supplies, &c., not being available, the march, under advice from the Secretary of War, has had to be abandoned. In last year's report I expressed my opinion of the great benefit to officers, men, and horses accruing from this summer encampment, where experienced officers are present to impart instruction in the most essential part of a soldier's education—the knowledge of how to do his proper part under the exigencies of actual warfare. The routine life in garrison, while it may inculcate habits of discipline, and afford opportunity for training in the use of arms and for teaching the tactical drills, cannot teach the soldier to any appreciable extent what it is so necessary for him to know when called upon to undergo

the fatigues of the march, and bear with the hardships of temporary camps and the constant duty required of him in field operations. These annual encampments, therefore, meet with my cordial approval, and I only regret that means will not permit all the troops in this division, whose duties all the year round are generally the routine ones pertaining to permanent stations, to be assembled at convenient points in summer camps.

It was contemplated to encamp the Twelfth United States Infantry, serving in the department of the East (distributed amongst three posts), during the past summer, but for want of proper facilities the project project was abandoned.

In December, 1882, the garrison of Fort Barrancas, Fla. (batteries B, E, and K, Third United States Artillery), which had on account of the danger of yellow fever been removed during the dangerous season to Mount Vernon Barracks, Ala., returned to its station at Pensacola, Fla. This year, early in the summer, there was grave anticipation that the ports of Florida might again be severely ravaged by yellowfever. Accordingly Capt. John L. Tiernon, Third United States Artillery, the commanding officer at Fort Barrancas, made timely application to move his command into a healthy encampment until the dangerous season had passed. With the approval of the General of the Army a suitable location was decided upon in the vicinity of Atlanta, Ga., and batteries B, E, and K, Third Artillery, of Fort Barrancas, went into camp there June 25, 1883, a small guard being left at Barrancas in charge of First Lieut. Charles F. Humphreys, Third United States Artillery. The anticipations of a sickly season proved well founded, and the navy-yard at Pensacola, in the immediate vicinity of Fort Barrancas, has suffered heavily from yellow fever this summer. The small guard left at Fort Barrancas was in good time movedin to Fort Pickens, and was soon followed by the United States marines from the navy-yard at Pensacola. I am able to state that owing to these timely precautions no case of fever has occurred amongst the troops at any of the posts in the South. At Saint Francis Barracks, Saint Augustine, Fla., the troops suffered somewhat severely in October, 1882, from dengue fever, but there were no fatal results. Otherwise the health of the command in general has been exceptionally good.

In my last report I adverted to the transfer of the military reservation at Tampa, Fla., to the Interior Department, and the steps then in progress to transfer the troops at Fort Brooke to other posts. In December, 1882, the arrangements were completed, and on the 21st of that month battery G, Third United States Artillery (Barstow's), was transferred to Saint Augustine, Fla., to replace Battery F of that regiment, selected as a mounted battery and transferred to San Antonio, Texas, December 20. Batteries I (Myrick's) and L (Hess's) were on the 23d of December, 1882, transferred to Mount Vernon Barracks, Ala., and now form the garrison at that post.

In the department of the East the only changes have been the transfer of Battery G, Fifth United States Artillery, from Fort Hamilton to Fort Columbus, New York Harbor, June 4, 1883, and the return of Battery M, Fifth United States Artillery, from Fort Wadsworth, where it had been stationed as portion of the guard maintained at that post, to Fort Hamilton, its permanent station, on the 6th of June, 1883, leaving one battery at Fort Wadsworth. The addition of a battery to the force at Fort Columbus was much needed, the extent of the post and the presence of division and department headquarters and the presence of a large number of military prisoners making duty more than usually onerous.

The wishes of the General of the Army expressed to me a few years ago that each artillery post should have at least two batteries as its garrison, so that proper instruction in heavy artillery tactics might be afforded, have been carried out with the exception of Fort Preble, Portland Harbor, Me., at which post, owing to a lack of accommodation, there is still but one battery of Artillery (M, Fourth Regiment). It is my purpose to station another battery there, should it be found practicable to furnish the amount necessary for the additional quarters heretofore estimated for. The papers in the case are now with the War Department, and I can only reiterate what I indorsed upon them a few days ago, that the additions are extremely desirable to make Fort Preble a two-company post and keep its professional instruction up to a respectable standard.

Under the present system of distribution of the light batteries of artillery I have in my command four, one at the headquarters of the Second United States Artillery, at Washington Barrack, D. C., one at Little Rock barracks, Ark., one at the headquarters of the Fourth United States Artillery, at Fort Adams, R. I., and one at the headquarters of the Fifth United States Artillery, at Fort Hamilton, New York Harbor. The light battery at Washington barracks is now well provided for in point of quarters and stables, but not so the light batteries at Little Rock, Fort Adams, and Fort Hamilton, so far as barracks for the men are concerned. Plans and estimates for new barracks at Fort Adams and at Fort Hamilton, to be adjacent to the battery stables, have recently been forwarded, and I hope may receive favorable consideration. It is difficult for commanding officers to bring their commands to a high degree of efficiency whilst they labor under so many disadvantages as to location for their men and the proper means of elementary instruction. I take the occasion to reiterate what I have heretofore said, that I do not think the light batteries are fulfilling a useful purpose as at present located. A light artillery school, under one of our best artillery field officers, where all, or at least four or five, of the light batteries could be concentrated, would, in my judgment, best fulfill the object of their organization. Scattered as they are at present, and associated with foot troops, and required often to perform kindred duties, the specialty of their arm is apt to be lost sight of.

Early in September I forwarded the reports of Lieut. Col. W. D. Whipple and Maj. H. C. Corbin, assistant adjutant-generals of the two departments of the division, as to the condition of the post schools, so that it seems but necessary to say here that, while post commanders have done their best to further education amongst the enlisted men, the progress has not been satisfactory. Suitable school teachers are scarce, and the men themselves generally take but little interest in the schools, looking upon them as so many calls for additional time and labor, and consequent reduction of the scanty hours of leisure.

The administration of post, company, and regimental funds at department headquarters is, I think, working satisfactorily. The close scrutiny maintained over all the expenditures prevents any use of the funds for purposes not contemplated by regulations or manifest propriety, and I advert to the subject here because I am aware that unjust aspersions are frequently made in the public press as to the use of the funds in question. At no time to my knowledge has there been more correctness in this respect than at present.

The annual rifle competitions of 1883 have recently terminated, and the results are conclusive that interest in this most essential part of military instruction has not diminished. The competitions of the Division of the Atlantic and the Department of the East took place at

Creedmoor, L. I., with the sanction of the War Department, and those of the Department of the South, at Mount Vernon Barracks, Ala. The liberal allowance by the War Department for commutation of rations for the enlisted men competing for places and prizes has taken away even the appearance of unnecessary hardship, and has given general satisfaction. The competitions of this year were, I think, more promptly devised and executed than in previous years, and officers and men engaged in them have now all returned to their respective stations. Believing that it is well for purposes of discipline that the range where our annual competitions take place should be under control of the United States military authorities, it is my intention at some future time to select for the purpose named a post in the Department of the East where it is practicable to construct the necessary facilities in point of ranges and other essentials.

I inclose the several reports of the chiefs of the staff corps at these headquarters, and they will be found to exhibit in detail the operations of their respective departments during the past year. They have one and all given close attention to the requirements of their special branches, and those of them charged with the disbursement of public funds have at all times held the necessity for an economical administration of them in prominent view. Indeed, the necessity for econmy under the limited appropriations is so great that it is difficult sometimes to discriminate as to where the funds should be supplied; this especially with reference to the quartermaster's department. The needs of all the posts are great, but with the great care exercised in the distribution of the funds each has received what is necessary for its most urgent purposes. It is seldom that valuable public property has to go to decay for want of the means to put it in order at the proper time. The reports of the inspectors, inclosed, evince a commendable degree of discipline and instruction at the several garrisoned posts. I have been gratified of late to see the efforts made to improve the clothing of our soldiers, and to place new recruits at less disadvantage on that score than in the past. I ask attention to the recommendation of the inspector of the Department of the East that sheets be issued to troops in barracks. They now have the pillowslip and the bedsack, and the addition of an inexpensive sheet of suitable material would be no more than what is demanded by the requirements of modern civilization for soldier as well as citizen. Any step tending to make the enlisted man a self-respecting individual, so long as it is in the line of military propriety and discipline, will ultimately prove of benefit to the service in general and to the tone of the ranks of the Army in particular. The report of the chief quartermaster of the department exhibits in detail all that has been done during the past year in the matter of repairs, construction, contracts, &c. Recently, under the immediate supervision of the chief quartermaster, the public buildings of the military reservation at Fort Sullivan, Eastport, Me., have by direction of the War Department been sold at public auction, and the reservation has been abandoned for military purposes. For many years past Fort Sullivan has not been deemed essential for the defense of the Atlantic seaboard, and its retention seemed no longer necessary. The project of establishing a garison at Fort Montgomery, Rouse's Point, N. Y., a strategic point of importance, still remains in abeyance until suitable barracks are provided, but I trust it may not be long before the views heretofore expressed in this matter can be put into execution.

The medical director reports the health of the command satisfactory. He has personally inspected the medical departments at all the posts in

the Department of the East during the past year, and is able to report a satisfactory condition of affairs thereat.

The reports of the chief commissary of subsistence and of the chief paymaster are satisfactory as to their departments.

The report of the judge advocate of the division is an interesting document, and exhibits in detail the administration of military justice during the year. The statistics of crime do not exhibit any increase in the number of military offenders as compared with the strength of the command, but they cannot be held to be entirely satisfactory.

I trust that in the several reports which have been recently submitted to the Headquarters of the Army, in regard to the crime of desertion may be found sufficient material to form the basis of remedial measures of a permanent nature. The soldier, like his civil brother, wants something to look forward to in his old age, when length of service has diminished his activity and usefulness. It is needless to enlarge upon what his prospects are now; those in authority are fully able to judge from the data in their possession what they ought to be. For the faithful soldier the future should be made full of promise whose fulfillment is guaranteed by the word of law.

I ask attention to the suggestion in the judge advocate's report as to the propriety of legislation giving the corps of judge advocates a reasonable promotion in rank and pay for length of service in the corps. At present they all hold the rank of major, the only prospect of promotion being the remote one that some day one of their number may attain the position of judge-advocate-general. I find that the majority of them have held their present rank, in the corps for nearly seventeen years, and this fact alone is a powerful plea in their behalf.

It has happened in this division during the past year that a colonel was in command of the Department of the South, but under the seventy-second article of war had no power to convene general courts-martial for the trial of offenses committed by the troops of his command. I am of opinion, therefore, that no harm to the service would accrue should the seventy-second article of war be reframed so as to provide that any officer, whatever his rank, assigned by the proper authority to the command of a military geographical department, shall be competent to appoint general courts-martial within his department.

By what seems to have been an oversight in the last appropriation bill for the support of the Army for the current fiscal year, the general-service clerks at division and department headquarters have been deprived of their extra-duty pay, an important item to them when the scale of their allowances is considered. I express the hope in their behalf that the omission to provide the extra-duty pay, authorized since the class was established in 1868, may be supplied at the earliest moment practicable.

In conclusion, I deem it proper to say that the officers of my staff, personal and general, have performed their duties with intelligence and fidelity during the year, and have rendered valuable assistance in the conduct of affairs within the division.

Pursuant to instructions, this report and all of its written inclosures are submitted in duplicate—a printed tabular statement of "movements of troops" in triplicate.

I am, sir, very respectfully, your obedient servant,

WINF'D S. HANCOCK,
Major-General, Commanding.

The ADJUTANT-GENERAL U. S. ARMY,
Washington, D. C.

REPORT OF MAJOR-GENERAL SCHOFIELD.

HEADQUARTERS MILITARY DIVISION OF THE PACIFIC,
Presidio of San Francisco, Cal., October 3, 1883.

SIR: I have the honor to submit the following report of operations in this military division during the last year:

The Military Division of the Pacific comprises the Department of Arizona, commanded by Brig. Gen. George Crook; the Department of the Columbia, commanded by Brig. Gen. Nelson A. Miles (now temporarily by Col. Frank Wheaton, Second Infantry), and the Department of California, under my immediate command. The territorial limits of the three departments remain the same as at the date of the last annual report, except that the southern portion of the State of California, which formerly belonged to the Department of Arizona, was transferred to the Department of California by an order of the War Department, dated February 14, 1883. This change resulted naturally from the discontinuance of the depot and post at Yuma, no longer needed since the troops in Arizona are supplied directly by railroad.

The accompanying reports of Generals Crook and Wheaton give full account of operations in their respective departments. The able and exhaustive report of General Crook upon the difficult Apache question throws valuable light upon that subject. I need only add my commendation of the manner in which the commanders of those departments have discharged their important duties.

For the details of movements of troops and of official business transacted in the Department of California, I beg leave to refer to the accompanying reports of the chief staff officers on duty at these headquarters, viz:

Col. J. C. Kelton, assistant adjutant-general.

Maj. J. C. Breckinridge, assistant inspector-general.

Maj. Wm. Winthrop, judge-advocate.

Col. Rufus Saxton, assistant quartermaster-general, chief quartermaster.

Maj. George H. Weeks, quartermaster, chief quartermaster.

Maj. M. R. Morgan, commissary of subsistence, chief commissary of subsistence.

Col. Charles Sutherland, surgeon, medical director.

Col. George L. Febiger, assistant paymaster-general, chief paymaster of the division.

Maj. Charles J. Sprague, paymaster, chief paymaster, department of California.

Maj. Wm. A. Jones, corps of engineers, engineer officer.

Happily there has been in this department during the last year no disturbance of the peace calling for interposition of troops.

Under instructions from the Interior and War Departments, officers have been detailed to make surveys of the Klamath Indian Reservation in California, and the Duck Valley Indian Reservation in Nevada and Idaho. The proposed allotment of lands in severalty to the Klamath Indians and the sale for their benefit of the residue of their reservation, will, it is believed, prove beneficial both to the Indians and to the citizens of California who are developing the resources of that part of the State. But it is an essential condition to the success of this measure that the lands allotted to the Indians be made inalienable for a long term of years.

The question which was submitted by my predecessor in his last annual report, and which has since been the subject of correspondence with the War and Interior Departments, respecting the Piute Indians who had been placed upon the Yakama Reservation in Washington Territory, has not yet been finally disposed of. A considerable number of these Indians have quitted the Yakama Reservation and have made their way back to their old homes, near Warner Valley, Oregon. The question, what disposition should be made of them, has been fully submitted, and I only await the necessary orders of the War Department and the favorable season of the year to take the action decided on. This may be done, it is believed, without resulting in hostilities. It is a question of cost, and of the future contentment and well-being of the Indians.

The subject of desertion from the Army continues to merit the most thoughtful consideration. In this connection, the recent decision of the circuit court of the United States, in San Francisco, referred to by Major Winthrop in his report, is deemed important. This decision fully sustains the military jurisdiction in all cases of desertion. It also sustains, inferentially, the validity of the claim of the United States to the services of the soldier for the full term of his enlistment, however long he may have been absent without leave, and his liability to trial and punishment for such unauthorized absence during the two years not barred by the statute of limitations. This decision seems to enable the military courts to impose the penalties required by the necessities of the military service, while acting in entire accord with the judicial interpretation of the law.

The causes of desertion are numerous, and some of them, perhaps, beyond the reach of any practicable remedy. But the measures recently adopted to ascertain, as far as possible, the actual cause of desertion in every case, should lead to the appropriate remedy wherever such is possible.

Rifle practice has reached a very gratifying degree of excellence among a largely increased proportion of the troops. For the most skillful marksmen at long ranges the capacity of the present service rifle and ammunition has been exhausted. With them it is no longer a contest mainly of *skill* but one of *chance* in the use of an imperfect rifle and variable ammunition. I respectfully recommend Colonel Kelton's suggestions on this subject to the most favorable consideration.

The condition of the troops of this division in respect to discipline and instruction is all that could be expected of small and widely dispersed detachments. To improve their discipline, perfect their instruction, and, above all, to greatly increase their effective strength for service in the field, they should be concentrated into as few and as large garrisons as possible. In the Department of California this may now be done without the sacrifice of any important interest. The large majority of the troops in the department should now be concentrated at the Presidio of San Francisco, which affords in an eminent degree all the necessary facilities for the economical support and complete instruction of troops of all arms. In this connection I invite special attention to the accompanying report of Major Jones, engineer officer whose recommendation is fully approved.

In conclusion, I take pleasure in expressing my entire satisfaction with the manner in which the staff officers of the military division and department have discharged their important duties.

I am, sir, very respectfully, your obedient servant,

J. M. SCHOFIELD,
Major-General, Commanding.

The ADJUTANT-GENERAL U. S. ARMY,
Washington, D. C.

REPORT OF THE ADJUTANT-GENERAL.

WAR DEPARTMENT, ADJUTANT-GENERAL'S OFFICE,
Washington, October 30, 1883.

SIR: I have the honor to submit my annual report for the year ending September 30, 1883.

MILITIA.

In accordance with growing usage, officers of the Army were detailed during the past summer and fall to inspect State militia encampments at the following points:

Illinois.—At Springfield, by Capt. J. A. P. Hampson, Tenth United States Infantry.

Indiana.—At Indianapolis, Capt. W. L. Kellogg, Tenth United States Infantry; Capt. J. A. P. Hampson, Tenth United States Infantry; First Lieut. W. A. Kobbé, jr., Third United States Artillery; and First Lieut. C. S. Burbank, Tenth United States Infantry.

Iowa.—At Cedar Falls, by Capt. W. H. Powell, Fourth United States Infantry.

Maine.—At Augusta, by Second Lieut. J. R. Totten, Fourth United States Artillery.

Massachusetts.—At South Framingham, Hingham, and Essex, by Maj. A. C. M. Pennington, Fourth United States Artillery.

Michigan.—At Brighton, by Capts. F. E. Lacey and S. H. Lincoln, Tenth United States Infantry.

Minnesota.—At New Ulm and White Bear, by Capt. G. Lawson, Twenty-fifth United States Infantry.

New York.—At Peekskill, by Col. O. B. Willcox, Twelfth United States Infantry.

Rhode Island.—At Oakland Beach, by Capt. H. C. Cushing, Fourth United States Artillery.

The reports appended hereto of the several inspecting officers are highly interesting. The steady improvement in discipline, soldierly bearing, and knowledge is undoubtedly due to the generally excellent temper and character of the State troops, and the closer relations maturing between the regular Army and the militia—relations productive of the best results to both services.

In addition to the regular State encampments, competitive drills have been held at Nashville, Tenn.; Cleveland, Ohio; Charleston, S. C.; New Orleans, La.; and Detroit, Mich. While these drills are outside of the regular course of military instruction, they are nevertheless productive of much good, and the War Department, in the interest of improvement, can well spare them the expense of professional judges. The reports submitted indicate, on the part of the organizations competing, thorough instruction in the manual of arms, a spirit of emulation and ambition, together with the love of their adopted profession, which is remarkable and highly creditable to both officers and men. The aim in view, however, should be enlarged. Much time and labor has been given to the acquirement of a precision which, however admirable as a spectacular exhibition, is neither required nor contemplated in the Army. Military judges, as it should be, attach unusual weight to the results of inspection, general appearance,

and soldierly bearing. Besides the drill, competition should be had in camps, in cleanliness, in the kitchens and messes, in discipline and conduct on guard and outpost duty; in other words, competition should determine which are the best troops instead of the best drilled men simply.

MILITARY COLLEGES.

The tables subjoined exhibit the apportionment of details, corrected to October 1, 1883, and the data contained in the reports of the several officers performing the duties of professor of tactics and military science.

The law authorizing the detail of officers of the Army at a limited number of colleges and universities evidently contemplated that the services of the military professors would be the means of securing a number of youths well instructed in military knowledge, who when occasion required could efficiently exercise command in the militia of their respective States. A better plan could scarcely have been devised, and, carried out faithfully, will prove a powerful factor in insuring the thorough efficiency of that branch of the military service.

Section 1225 of the Revised Statutes empowers the President, upon the application of a college or university having capacity to educate at the same time not less than 150 male students, to detail an officer of the Army to act as president, superintendent, or professor thereof. In establishing the minimum number of students that could be educated at a college or university, the law no doubt contemplated that not only such institutions should have capacity for educating a certain number of youths, but that at least the minimum number prescribed be actually under instruction. This point the War Department has no means of verifying except from the reports required of the military professor; and a glance at the second table submitted shows that a minority of the colleges or universities named therein actually educate 150 students. It is earnestly recommended that, if necessary to prevent cavil, the law be amended so as to require applications for the detail of a military professor to be accompanied by satisfactory proof that at least 150 male pupils above the age of fifteen are actually present at the institution.

The colleges and universities at which officers of the Army may be detailed should be designated by the governor of the State in which located, as being most interested in the progress of the State and its institutions, and possessing greater means of information necessary to wisely determine the question of selection.

The section of the statutes above referred to prescribes that the officer detailed shall act as "president, superintendent, or professor." He should, therefore, be a recognized member of the faculty, with equal vote, and not simply a prefect of discipline. This is of the utmost importance to secure the best results as well as to preserve the dignity of the position of the professor of tactics and military science.

Drills should not be held outside of regular hours, but considered as part of the curriculum of instruction.

Finally, I am of opinion that officers should be forbidden to instruct

in any other branch of education except in so far as the instruction has direct reference to military knowledge.

Universities and colleges.	No. of students.		Total average attendance.	Average attendance.		Aptitude of pupils.	Interest manifested by faculty.
	Over 15 years of age.	Under 15 years of age.		Artillery drills.	Infantry drills.		
Maine State College, Orono	54	.....	54	.....	40	Good	Very good.
University of Vermont, Burlington	73	.....	73	15	64	Excellent	Excellent.
Massachusetts Agricultural College, Amherst	65	.....	65	28	61	Good	Marked.
Union College, Schenectady, N. Y.	.....	.....	.....	.....	.....	.....	.....
Cornell University, Ithaca, N. Y.	227	.....	227	27	185	Good	Good.
Cathedral School of St. Paul, Garden City, Long Island, N. Y.	.....	.....	.....	.....	.....	.....	.....
Pennsylvania Military Academy, Chester.	112	19	131	.....	131	Very good	Commendable and unremitting.
Allegheny College, Meadville, Pa.	.....	.....	.....	.....	.....	.....	.....
Rutgers College, New Brunswick, N. J.	126	.....	126	.....	35	Good	Good.
Pennsylvania State College, Centre County.	.....	.....	.....	.....	.....	.....	.....
Hampton Normal and Agricultural Institute, Virginia.	310	33	343	42	170	Very good	Satisfactory.
Bingham School, Orange County, North Carolina.	.....	.....	.....	.....	.....	.....	.....
South Carolina Military Institute, Charleston.	.....	.....	.....	.....	.....	.....	.....
East Florida Seminary, Gainesville, Fla.	51	27	78	27	48	Good	Very great.
Agricultural and Mechanical College of Mississippi, Starkville.	185	6	191	(*)	(*)	Good	Rather negative.†
Agricultural and Mechanical College of Texas, near Bryan.	229	5	234	16	.....	Good	Good.
University of the South, Sewanee, Tenn.	104	22	126	20	51	Fair	Satisfactory.
Agricultural and Mechanical College of Kentucky, Lexington.	143	20	163	.....	119	Good	Good.
Ohio State University, Columbus	280	(*)	280	42	150	Fair	Very satisfactory.
Indiana Asbury University, Greencastle.	280	30	310	117	117	Good	Very good.
Michigan Military Academy, Orchard Lake.	78	16	94	45	64	Not good	Not good.
Southern Illinois Normal University, Carbondale, Ill.	64	.....	64	17	58	Very good	Not good.
Illinois Industrial University, Champaign.	214	.....	214	65	70	Good	Very satisfactory.
University of Wisconsin, Madison	.....	.....	.....	.....	.....	.....	.....
University of Missouri, Columbia	400	25	425	14	31	Good	Fair.
Kansas State Agricultural College, Manhattan.	117	2	119		20	Good	Good.
Iowa State University, Iowa City	151	.....	151	22	109	Average	Very indifferent.
Cornell College, Mount Vernon, Iowa.	.....	.....	.....	.....	.....	.....	.....
University of California, Berkeley	.....	.....	.....	.....	.....	.....	.....

* Not stated.

† Great interest shown and much assistance given in military discipline; found essential to control of pupils.

Table showing apportionment of details at colleges, universities, &c., under section 1225, Revised Statutes.

States and groups.	Aggregate population of States and groups.	No. of officers to which entitled.	No. on duty in State or group.	Officers detailed.	Colleges, &c., at which detailed.	Expiration of detail.
Maine	648,945			Second Lieut. Edgar W. Howe, Seventeenth Infantry	Maine State College, Orono	July 1, 1885.
New Hampshire	346,984					
Vermont	332,286			First Lieut. H. E. Tutherly, First Cavalry	University of Vermont, Burlington	July 1, 1884.
Massachusetts	1,783,012			Second Lieut. V. H. Bridgman, Second Artillery	Massachusetts Agricultural College, Amherst	July 1, 1884.
Connecticut	622,683					
Rhode Island	276,528					
	4,010,438	3	3			
New York	5,083,810	3	3	First Lieut. H. W. Hubbell, jr., First Artillery	Union College, Schenectady	July 1, 1886.
				First Lieut. W. S. Schuyler, Fifth Cavalry	Cornell University, Ithaca	July 1, 1886.
				First Lieut. C. A. L. Totten, Fourth Artillery	Cathedral School of St. Paul, Garden City, L. I.	July 1, 1886.
Pennsylvania	4,282,786			First Lieut. W. P. Duvall, Fifth Artillery	Pennsylvania Military Academy, Chester	July 1, 1884.
				First Lieut. J. W. Pullman, Eighth Cavalry	Allegheny College, Meadville, Pa	July 1, 1886.
New Jersey	1,130,983			Second Lieut. F. L. Dodds, Ninth Infantry	Rutgers College, New Brunswick, N. J	July 1, 1885.
Delaware	146,654			Second Lieut. J. A. Leyden, Fourth Infantry	Pennsylvania State College, Centre County	July 1, 1886.
Maryland	934,632					
	6,496,055	4	4			
West Virginia	618,443					
Virginia	1,512,806			Second Lieut. Geo. Le R. Brown, Eleventh Infantry	Hampton Normal and Agricultural Institute, Hampton, Va.	July 1, 1884.
North Carolina	1,400,047			Second Lieut. J. Batchelder, Twenty-fourth Infantry	Bingham School, Orange County, North Carolina	July 1, 1886.
	3,531,296	2	2			
South Carolina	995,622			Second Lieut. E. M. Weaver, jr., Second Artillery	South Carolina Military Institute, Charleston	July 1, 1886.
Georgia	1,539,048					
	2,534,670	1	1			
Florida	267,351			Second Lieut. Arthur L. Wagner, Sixth Infantry	East Florida Seminary, Gainesville, Fla	July 1, 1885.
Alabama	1,262,794					
	1,530,145	1	1			

Table showing apportionment of details at colleges, universities, &c., under section 1225, Revised Statutes—Continued.

States and groups.	Aggregate population of States and groups.	No. of officers to which entitled.	No. on duty in State or group.	Officers detailed.	Colleges, &c., at which detailed.	Expiration of detail.
Mississippi	1,131,592			Second Lieut. W. L. Buck, Thirteenth Infantry	Agricultural and Mechanical College of Mississippi, Starkville.	July 1, 1886
Louisiana	940,103					
	2,071,695	1	1			
Texas	1,592,574			First Lieut. Charles J. Crane, Twenty-fourth Infantry	Agricultural and Mechanical College of Texas, near Bryan.	July 1, 1885.
Arkansas	802,564					
	2,395,138	1	1			
Tennessee	1,542,463	1	1	Second Lieut. R. W. Dowdy, Seventeenth Infantry	University of the South, Sewanee, Tenn	July 1, 1886.
Kentucky	1,648,708	1	1	First Lieut. C. R. Tyler, Sixteenth Infantry	Agricultural and Mechanical College of Kentucky, Lexington.	July 1, 1886.
Ohio	3,198,239	2	1	First Lieut. George Ruhlen, Seventeenth Infantry	Ohio State University, Columbus	July 1, 1884.
Indiana	1,978,362	1	1	Second Lieut. J. B. Goe, Thirteenth Infantry	Indiana Asbury University, Greencastle	July 1, 1886.
Michigan	1,636,331	1	1	Second Lieut. H. A. Schroeder, Fourth Artillery	Michigan Military Academy, Orchard Lake	July 1, 1886.
Illinois	3,078,769	2	2	Second Lieut. C. G. Starr, First Infantry	S. Illinois Normal University, Carbondale	July 1, 1886.
				Second Lieut. C. McClure, Eighteenth Infantry	Illinois Industrial University, Champaign	July 1, 1886.
Wisconsin	1,315,480	1	1	Second Lieut. G. N. Chase, Fourth Infantry	University of Wisconsin, Madison	July , 1885.
Missouri	2,168,804			Second Lieut. John J. Haden, Eighth Infantry	University of Missouri, Columbia	July 1, 1884.
Kansas	995,966			First Lieut. Albert Todd, First Artillery	Kansas State Agricultural College, Manhattan	July 1, 1884.
Colorado	194,649					
	3,359,419	2	2			
Iowa	1,624,620			First Lieut. E. C. Knower, Third Artillery	Iowa State University, Iowa City	July 1, 1886.
Minnesota	780,806			First Lieut. S. R. Jones, Fourth Artillery	Cornell College, Mount Vernon, Iowa	July 1, 1886.
Nebraska	452,433					
	2,857,859	2	2			
California	864,686			Second Lieut. J. A. Hutton, Eighth Infantry	University of California, Berkeley	July 1, 1886.
Oregon	174,767					
Nevada	62,265					
	1,101,718	1	1			

WAR DEPARTMENT, ADJUTANT-GENERAL'S OFFICE, *Washington, September* 24, 1883.

RETIREMENT OF VETERAN SOLDIERS.

While the Soldiers' Home is provided for the men who have served twenty years, or have been discharged the service for disability resulting from injuries received in the line of duty, no provision is made, except by the slow process of special legislation in individual cases, for that very small but highly meritorious class of veterans who, after almost a life-time given to the service of their country, find themselves burdened with the infirmities of age, their usefulness and activity gone, and insufficient means to live upon in their declining days. I earnestly recommend that Congress be asked to enact a law authorizing the retirement of men who have faithfully and honorably served for not less than thirty-five years on the full pay of the grade held at the time of application for transfer to the retired list. The following cases so forcibly illustrate the absolute justice of such a measure that I deem further comment supererogatory:

Edward Donnelly originally joined the Army (Battery C, First U. S. Artillery) in 1843, and served through the Mexican War and through the war of the rebellion, most of the time as a non-commissioned officer. Each discharge certifies to the fact that he was an excellent soldier and a good man. Finally, after nearly forty years' service, broken down in health, he was, while a member of Battery A, Fifth Artillery, discharged on surgeon's certificate of disability, and now—a married man, with two children—receives the trifling pension of $4 per month.

Private Conrad Schroeder, Battery H, Fifth U. S. Artillery, entered the service in 1849, and is now approaching the close of his eighth enlistment. He is feeble and quite deaf, the result of long and hard service. He has a wife—an aged woman—who cannot, of course, go to the Soldiers Home. So that, after almost a life spent in the service of his country, this aged veteran has the prospect before him of no other refuge for himself and wife than the poor-house. His disabilities being entirely incident to old age, the pension, if any, allowed him on discharge would far from suffice for his own needs, without taking those of his wife into consideration.

DISMISSAL OF OFFICERS.

Section 1229 of the Revised Statutes authorizes the President to drop from the rolls of the Army for desertion any officer who is absent *from duty* three months without leave. As officers on the retired list, though subject to the Rules and Articles of War, are not on duty within the meaning of the above section, I recommend it be amended to include that class of officers, and thus provide authority for summary action in their case whenever the President may deem it necessary.

TERM OF SERVICE.

The statistics of the Army show that nearly two-thirds of the desertions occur within the first eighteen months of the soldier's military service. The causes, real or alleged, for this crime are numerous. One of the principal ones, however, is undoubtedly the result of inaptitude for the service, consequent restlessness under its exactions and restraints, and the far-off prospect of release. I beg, therefore, to recommend that section 1119 of the Revised Statutes, establishing the term of service at five years, be amended to reduce it to three; re-enlistments, as now, to be for five. Many men who desert for the reasons stated above

would, it is confidently expected, serve their full term if they could realize that a comparatively short time will honorably free them from their engagement.

The law of August 4, 1854 (section 1282, Revised Statutes), grants increased pay to men re-enlisting within thirty days after the expiration of term of service. To secure to the regiment the services of men identified with it, and sharing in a degree its fame and aspirations I recommend that the law be amended so as to make the increased pay depend on immediate re-enlistment in the same regiment, and grant the man re-enlisting one, two, or three months' furlough, according to the number of terms he has already served.

DISCHARGES.

The increasing number of men discharged the service on their own application, or that of their friends, seems to demand the adoption of measures that will protect the Government from loss. It is therefore recommended that all discharges by favor—unless long and faithful service on the part of the man constitute a controlling element of favorable consideration—be made conditional on the reimbursement to the Government of the expense of recruiting and transportation, or a fixed sum, say $100.

SETTLEMENT OF CLOTHING ACCOUNT.

Section 1302, Revised Statutes, provides that the money value of all clothing overdrawn by the soldier beyond his allowance shall be charged against him every six months on the muster-roll of his company, and under the above provision the Regulations of the Army (paragraph 2081) prescribe that the settlement shall be made on the 30th of June and 31st of December of each year, without regard to date of enlistment. This mode entails either serious loss to the Government or grievous discomfort to the soldier. The allowance of clothing for the first year is a trifle over $60. The money value of the clothing issued to a recruit at a rendezvous and depot ranges from $45 to $50, and on his arrival at regimental headquarters, the issue of a uniform coat and helmet increases that amount by $11.33. Should he enlist in January or July he draws four months' full pay while deeply indebted to the Government, and if his enlistment takes place in June or December he must serve several months without receiving any pay. In following years the clothing allowance for six months is often drawn and even exceeded long before due, and this cannot be prevented, the necessities of the soldier, resulting possibly from hard service and perhaps from lack of aptitude in taking proper care of his clothing, make it imperative he should receive articles of clothing before they are due and probably in excess of the allowance.

In a statement I have had the honor to submit in support of my recommendation for a change in the mode of settling clothing accounts, it was shown that an examination of the muster-rolls of the Army for the two months ending June 30, 1881, developed the fact that the charges against deserters for clothing overdrawn amounted to $6,377.56. This sum, less the generally small amount of pay due them at the date of their desertion, was a clear loss to the Government. Assuming that each of the 3,578 men who deserted during the past year was

indebted for clothing received but unpaid in the sum of $20 (a low average under the present system), the total loss from that source exceeded $70,000.

I therefore earnestly renew my recommendation that the law be amended to require a bimonthly settlement of clothing. This change will enable company commanders to regulate and prevent indebtedness except for comparatively small amounts.

MILITARY PRISONS.

The military prison at Fort Leavenworth, Kans., has not only maintained its ground as a successful institution, under excellent administration, during the past year, but has made good progress in all its departments, and more nearly meets the expectations of the authorities than in former years. The establishment of a penal institution is comparatively a simple matter, but a prison which is intended to be also a reformatory requires much more than the confinement of offenders within certain limits and under certain restraints as a punishment for crime committed. To combine such features as will tend to advance the public interest and, at the same time, improve the condition of the prisoner, by imparting to him some beneficial knowledge which probably he would never acquire voluntarily, is a much more difficult and intricate problem. This has been and continues to be the purpose for which the military prison was originally instituted and is now maintained, and the results have satisfactorily demonstrated that, with the experience acquired and to be yet gained while the prison is being brought up to the capacity which will be required permanently, the special features mentioned can be kept up without weakening, in any degree, the effect of disciplinary measures which, rather than mere punishment, is applied to the class of offenders confined therein for grievous disregard of military law and regulations.

During the fiscal year ending June 30, 1883, the amount of work done by the prisoners at ordinary labor in building and manufactures may be seen from the following statement, taken from the report of the governor of the prison, which is herewith submitted: For the Quartermaster's Department, 39,907 days of skilled and 34,779 days of unskilled labor, for the prison 18,114 days of skilled and 46,232 days unskilled labor. The results of this labor (omitting small items which will be found in detail in the reports from the officers of the prison) may be stated as follows: One brick building, 40 by 114 feet, 3 stories high, for dormitories; one set of quarters, 16 by 16 feet, 1 story high; 35,000 pairs of boots; 30,000 pairs of shoes; 30,000 corn brooms; 4,000 barrack chairs; 335 complete sets of harness; all the doors, sashes, and frames for the new buildings, and all necessary repairs to buildings at the prison and at Fort Leavenworth; 4,500 bushels of lime burned; raising large quantities of vegetables for the use of the prison, and 4,330 pounds of broom-corn for manufacture into brooms for the Army. During the past summer nearly 160 acres of ground have been cultivated, of which about 20 acres were overflowed by the Missouri River and the crops destroyed.

The representative money value of work done for the Quartermaster's Department is $27,969.35.

The transfer of prisoners was suspended during one quarter of the year, as there were not sufficient accommodations for them with safety to health. It was supposed, when the prison was first opened, that

capacity for from 450 to 500 men would be sufficient; but this estimate has proved too low, and increased accommodations must be provided for as fast as means can be obtained. The estimates for funds for maintaining and enlarging the prison have been made with great care, and the strictest economy is observed in the expenditures. As far as possible purchases are confined to material, and its manufacture or preparation for use is done by prison labor.

Number of prisoners in the prison on June 30, 1882	453	
Received up to June 30, 1883	352	
		805
Number discharged	307	
Number transferred	2	
Number died	5	
Number escaped	24	
		338
Remaining in prison June 30, 1883		467

The general health of the prisoners has been good, and the conduct of the inmates, as a rule, satisfactory.

The officers of the prison have given their best efforts to the administration of its affairs, and to their interest and fidelity the success of the institution is due.

A deep sense of justice urges me to renew my recommendation that the governor of the prison be given the local rank of colonel, with the pay and allowances of that grade. This is demanded not only by the importance and responsibility of his position and the manifold duties devolving upon him, but as a richly merited acknowledgment of the rare abilities and great powers exhibited by him in the successful management of this institution.

The military prison was established for the confinement of soldiers convicted of serious military crimes and offenses. Its use is for the whole Army, and the highest efficiency of management can only be reached by undivided control. I beg, therefore, to recommend that the prison authorities be held directly responsible to, and under the sole control of, the War Department. Its geographical location does not affect its status as the punitive and reformatory institution for the Army at large, and, in my opinion, its administration should be free from direct or indirect departmental supervision.

GOVERNMENT HOSPITAL FOR THE INSANE.

The following is a list of persons committed to the Government Hospital for the Insane, under the orders of the honorable the Secretary of War, from October 1, 1882, to October 1, 1883:

Officers of the United States Army	1
Officers of the United States Army (retired)	1
Enlisted men of the United States Army	31
Late soldiers of the United States Army	3
Late volunteer soldiers	1
Inmates of the United States Soldiers' Home	4
Military prisoners	4
Employés of the Quartermaster's Department	1
Total	46

WORKING OF THE OFFICE.

At the date of my last report the clerical and other force of this office was as follows:

Chief clerk	4
Clerks of class 4	21
Clerks of class 3	35
Clerks of class 2	67
Clerks of class 1	354
Clerks of class $1,000	16
Messengers	5
Assistant messengers	51
Watchmen	27
Laborers	3
Total	583

With the exception that, by the law of March 3, 1883, the number of clerks of class 1 is reduced by one and the number of watchmen is reduced to twenty, its composition remains the same as above.

The transfer of the records and clerks from a large double warehouse on New York avenue, above Seventeenth street, to the fourth floor of the south wing of the new building, which, in my last report, I reported in progress, has been successfully accomplished. The amount of the labor involved will be more readily appreciated when I state it involved the transfer of nearly 47,000 record books (regimental letter and indorsement books, company clothing books, and regimental and company descriptive, order, and morning report books), representing the records, in some cases incomplete, of 2,032 military organizations.

Since that date, the rooms assigned me on the third and fourth floors of the north and east wings have enabled me to transfer the records and clerks heretofore located in the old Navy building and in houses Nos. 616, 618, and 717 Seventeenth street, and 1704 G street. This labor has been quickly and efficiently performed under the immediate supervision of Messrs. Longan and Holmes, of my office, who, in the performance of this duty, imposed on them in addition to those of their responsible positions, have exhibited rare tact and excellent judgment. The divisions transferred have been grouped, as far as possible, with direct reference to their more or less intimate connection with one another, thus greatly facilitating the work of the office and lessening the time required for its performance.

The following table exhibits the labors of the enlisted volunteer pension branch and other divisions of the office engaged in business relating to claims for pension, bounty, homestead grants, &c.:

Statement of calls from the Commissioner of Pensions, Second Auditor, &c., for full or partial histories of officers and men of the late volunteer forces in connection with claims for pension, bounty, back pay, subsistence, land claims, lost horses, &c.

	On hand Oct. 1, 1882.	Received during the year.	Total.	Finished during the year.	On hand Oct. 1, 1883.
COMMISSIONER OF PENSIONS.					
Enlisted volunteer pension branch	41,936	156,785	198,721	183,611	15,110
Colored troops division	263	11,631	11,894	10,348	1,546
Volunteer service branch (officers' claims)	475	30,272	30,747	30,277	470
Total	42,674	198,688	241,362	224,236	17,126

Statement of calls from the Commissioner of Pensions, Second Auditor, &c.—Continued.

	On hand Oct. 1, 1882.	Received during the year.	Total.	Finished during the year.	On hand Oct. 1, 1883.
SECOND AUDITOR.					
Enlisted volunteer pension branch	1,793	20,124	21,917	19,414	*2,503
Colored troops division	165	3,911	4,076	3,720	356
Volunteer service branch	56	1,449	1,505	1,317	188
Total	2,014	25,484	27,498	24,451	3,047
THIRD AUDITOR.					
Volunteer service branch	19	714	733	705	28
GENERAL LAND OFFICE.					
Enlisted volunteer pension branch	652	4,067	4,719	4,114	605
Colored troops division	4	186	190	187	3
Total	656	4,253	4,909	4,301	608
SUBSISTENCE DEPARTMENT.					
Enlisted volunteer pension branch	457	1,534	1,991	1,544	447
Colored troops division	1	35	36	35	1
Total	458	1,569	2,027	1,579	448
PAY DEPARTMENT.					
Colored troops division	1	652	653	651	2

RECAPITULATION.

Number of calls from all sources:		
On hand October 1, 1882	45,822	
Received during the year	231,360	
		277,182
Finished during the year		255,923
Remaining on hand October 1, 1883		21,259

The above is a gratifying exhibit. The calls on hand from the Pension Office, October 1, 1882, amounted to 42,674, a number which, January 1, 1883, was increased to 63,567, owing to loss of time on the part of the old clerks in instructing the new ones and the removal of the greater bulk of the records to new quarters in this building. The Pension Office calls, as will be seen from above table, have been reduced to 17,126.

This result, however, has not been obtained without great drain on other parts of the office. Fully recognizing the importance of pension work, the demands of justice that the claims of men who offered themselves to their country at its call, and of the heirs of those who sealed their devotion with their blood, should be promptly adjudicated, I have reduced the other divisions of the office to the minimum force necessary for the bare transaction of current business, necessarily leaving undone much work of positive value. By the law of March 3, 1875, Congress, in view of the urgency of the matter, authorized the employment of sixty-seven clerks "to be employed in copying the worn-out muster-rolls and records," &c. This work has been temporarily suspended, but should, and will be, resumed. The condition of these important papers has, of course, not improved since the date of the above law, and due regard alike to the interests of the Government and the men imperatively demands that these official records be not allowed to perish.

Before closing this report I desire to invite your attention to the provisions of section 4 of the act of March 3, 1883. Under it all leave of absence granted to clerks and employés which exceeds thirty days in

*One thousand five hundred of these requests are for information upon which to settle amount due the Soldiers' Home from deceased soldiers.

any one year must be *without pay*. In justice to many of the old clerks, whose fidelity to duty keeps them at their desks during the entire year, but who may, at some future time, desire an extended indulgence, I beg to recommend that the law be amended so as to make the thirty days' yearly leave cumulative, but not to exceed three months in all, so that men entitled to the indulgence by diligent daily attention to duty may be granted two or three months' leave without being subject to deprivation of pay.

It affords me sincere pleasure to state that the business of the office during the past year has been satisfactorily discharged, and to record my appreciation of the general intelligence, efficiency, and faithfulness of my clerks.

Respectfully submitted,

R. C. DRUM,
Adjutant-General.

Hon. ROBERT T. LINCOLN
Secretary of War.

REPORT OF THE JUDGE-ADVOCATE-GENERAL.

WAR DEPARTMENT,
BUREAU OF MILITARY JUSTICE,
Washington, D. C., October 1, 1883.

SIR: In compliance with instructions contained in your letter of the 21st of September, 1883, I have the honor to submit the following report of the business of this Bureau for the year ending September 30, 1883:

Number of records of trials by general courts-martial received, revised, and recorded	1,985
Being an increase of 131 over last year.	
Number of reports and opinions rendered upon proceedings of courts-martial and miscellaneous questions of law	1,487
Being an increase of 596 over last year.	
Number of transcripts of proceedings of courts-martial furnished the Commissioner of Pensions and the Second Auditor of the Treasury	511
Number of copies of records furnished to parties under the one hundred and fourteenth Article of War	119

The number of records of garrison and regimental courts-martial received, examined, and filed at department headquarters is enumerated as follows:

Department of Arizona	531
Department of California	628
Department of the Columbia (no report received)	
Department of Dakota	1,379
Department of the East	1,055
Department of the Missouri	2,175
Department of the Platte	1,398
Department of the South	316
Department of Texas	922
Total	8,404

In my annual report of 1881 it was remarked:

The seventy-second Article of War should be amended by expressly authorizing the President of the United States and colonels commanding separate departments to appoint general courts-martial whenever necessary.

By Article 38 of the Rules and Articles for the Government of the Navy the President may appoint general courts-martial for the Navy whenever necessary.

So in maintaining the discipline of the Army like power should be conferred upon him by the Articles of War. Colonels are sometimes placed in command of separate

departments according to brevet rank of brigadier or major general. In view of the fact that there are now a great many colonels who have not the brevet rank of brigadier or major general, and that the number having such brevet rank is constantly diminishing, and that colonels may necessarily be called upon to command departments, the seventy-second Article should be amended as indicated; otherwise colonels in command of departments not having brevet rank will be unable to properly enforce the discipline of their departments in view of the restrictions contained in that article:

By the seventy-second Article of War it is provided that—

Any general officer commanding the Army of the United States, a separate army, or a separate department, shall be competent to appoint a general court-martial, either in time of peace or in time of war. But when any such commander is the accuser or prosecutor of any officer under his command the court shall be appointed by the President, and its proceedings and sentence shall be sent directly to the Secretary of War, by whom they shall be laid before the President for his approval or orders in the case.

This is the only provision of the written law conferring authority on the President to appoint a court-martial, nor has he authority by any statute to require any other official to do so in his name. If, then, he does not possess this authority by the express provisions of the Articles of War does he possess it by virtue of his constitutional office as Commander-in-Chief of the Army?

The general rule is that English statutes passed before the Revolution and in amendment of the common law, are to be assumed as part of the common law of the Colonies. In this point of view the English law, except when it is contradicted by or is incompatible with our constitutional or statute law, our judicial decisions, or the spirit of our institutions, has come to be recognized as law in nearly all the States of the Union. But there is no principle of the common law which pervades the Union and has the force and authority of law except such as is embodied in the Constitution and laws of the United States. Still we have to go to the common law as the suggestive if not the authoritative source of many doctrines of the law—the meaning of its terms—and this applies to military courts. (See 6 Opinions, p. 204; Van Ness *vs.* Packard, 2 Peters, p. 144; Wheaton *vs.* Peters, 8 Peters, p. 591.)

In time of peace the common law of England knew of no distinction between a citizen and a soldier; so that if the soldier deserted he could not be punished. If he struck his officer he was only liable to indictment for assault, and it was held that although the King may by his prerogative enlist soldiers even in time of peace, still if there was no statute passed to punish mutiny and subject them to a particular discipline they could not be punished for any military offense and were only amenable to the same laws as the rest of the King's subjects. (Macaulay's History of England, Vol. I, p. 296; Vol. II, p. 274; Lord Campbell's Chief Justices, Vol. II, p. 91.) Hence the authority of Parliament became necessary for the maintenance of military discipline. Statute 1, William and Mary, ch. 5, A. D. 1689, known as the first mutiny act, granted to the Crown for the first time authority to "cause courts-martial to be appointed to punish desertion, mutiny, or sedition among the troops authorized to be continued and raised for the safety of the kingdom," &c.

The mutiny act, with the provisions it now contains, was therefore essential for the government and establishment of the army.

The great charter of King John had made the people of England freemen. It protected them from trial save by those who knew the law of the realm and meant duly to observe it. (See Creasy on the Constitution.) It was within the prerogatives of the Crown to constitute courts of justice to act within the known and prescribed limits of the common law of the realm; but the Crown had no power to set up a

court for the declared purpose of judging its subjects by other rules, and thereby of awarding them punishments extending to life, limb, or liberty. (See Chitty's Prerogatives, p. 75; 1 Clode's Military Forces of the Crown, pp. 56 and 76.)

Each of the mutiny acts, from the first to the last, recites in the preamble, with but slight variation of language, that whereas the raising or keeping a standing army within the United Kingdom in time of peace, unless it be with the consent of Parliament, is against law; and whereas no man can be forejudged of life or limb, or subjected in time of peace to any kind of punishment within this realm by martial law, or in any other manner than by the judgment of his peers and according to the known and established laws, yet, nevertheless, it being requisite for the retaining of all the before-mentioned forces and other persons subject to military law in their duty that an exact discipline be observed, and that persons belonging to said forces who mutiny or stir up sedition or desert Her Majesty's service, or are guilty of crimes and offenses to the prejudice of good order and military discipline, be brought to a more exemplary and speedy punishment than the usual forms of law will allow.

The act then provides:

A general court-martial shall be convened by Her Majesty or some officer deriving authority to convene a general court-martial immediately or mediately from Her Majesty.

By the Constitution of the United States it is provided that "the President shall be Commander-in-Chief of the Army and Navy of the United States." (Article 2, section 2.) By the same instrument it is provided that Congress shall have power "to make rules for the government and regulation of the land and naval forces." (Article 1, section 8.)

By the common law of England, as we have seen, it is the undoubted prerogative of the Crown to command the army of the kingdom; so it is the undoubted right and privilege of Parliament to make rules and regulations for the government of the Army, the constitution of courts-martial, &c. Therefore, as the constitution of courts-martial is not in England an attribute of the power of command, independent of the authority of statute, it should not be deemed to be so with us, where the functions of government are kept separate and distinct in three departments.

The power of command in this sense means no more than that the President shall execute the laws enacted for the Army. It does not mean that he may make laws for its government and regulation in any case not provided for by the authority competent to legislate.

In view, however, of the oath of members of courts-martial as prescribed by the eighty-fourth Article of War, namely, that "if any doubt should arise not explained by said articles, then [to try and determine the case] according to your conscience, the best of your understanding, and the custom of war in like cases," and in view also of the general and indefinite manner in which some of our Articles of War are framed, it has been assumed by some that a kind of common-law jurisdiction underlies our Articles of War. In other words, that there is something in the nature of a *paterfamilias* in our military system. But it is well established that we have not under our Federal Government any common law as a source of jurisdiction; but when an authority is given the nature and extent of that authority and the mode in which it should be exercised must be regulated by the rules of the common law, under the

correction of the Constitution and statutes of the United States. Major-General Vans Kennedy, in his Treatise on Military Law, says (p. 12):

> I may observe in particular that my former remarks on the principles of military law depended upon a supposition that there was a custom of war from which these principles were derived. But fifteen years' experience of the duties belonging to the situation of the Judge-Advocate-General of an Army of thirty-five thousand men has convinced me that such a notion was completely erroneous. * * * I more distinctly perceived that the practice of military law could never become fixed unless it at all times conformed to that of the criminal law so far as the peculiar constitution of courts-martial would admit of.

As the Articles of War provide for the trial and punishment by courts-martial of crimes and offenses of a purely military nature, as well as of crimes and offenses that are committed against society at large, the oath of a member of a court-martial is made sufficiently broad to comprehend every crime and offense contemplated by the Articles of War.

The custom of war would apply to the crimes of being a spy, compelling a surrender, relieving the enemy, corresponding with the enemy, &c., in the same manner that the common law would apply to the crimes of murder, manslaughter, assaults, frauds, and forgeries, &c., as contained in Articles of War 58 and 60. In short, when the Articles of War mention a crime or offense and do not define it, we go to the common law of the land or to the custom of war in like cases to ascertain what it is, and determine it accordingly; and plainly this is the true meaning of the phrases referred to in the oath of members of courts-martial.

O'Brien, in his work on American Military Laws, page 32, says:

> In the first place, as Congress has the exclusive power of constituting military courts it can declare how these courts are to be organized, their jurisdiction, by whom and in what manner they are to be ordered, of whom they shall consist, their forms of proceeding, &c. In fine, Congress has full and absolute power in all things pertaining to military tribunals, and the President can in no way interfere with matters relating to these tribunals except as far as he is expressly authorized.

On the same subject Attorney-General Crittenden, (5 Op., p. 509) says:

> It follows from the exclusive power of Congress over the subject that no one can have any authority either to convene a court-martial or to affirm or disaffirm its decision unless it can be shown that such authority has been delegated by Congress.

It follows, therefore, that the President is not authorized to appoint courts-martial by virtue of his office as Commander-in-Chief of the Army, and under existing law he may only do so in the contingency mentioned in the seventy-second Article of War.

By the act of March 3, 1883, the assignment of officers to duty or command according to brevet rank can only be made when actually engaged in hostilities. The contingency mentioned above, therefore, has happened in the case of every colonel in the service, whether holding brevet rank of a higher grade or not. Brevet rank in time of peace can no longer avail in the exercise of command or duty. At the present time one department is commanded by a colonel, and other departments are and have been temporarily in command of colonels, who are thus incapacitated by law to enforce the discipline of their commands through the medium of general courts-martial. Commanders of geographical divisions now assume to appoint general courts-martial in departments commanded by colonels (or, when a general relinquishes command to a colonel, he sometimes appoints a number of courts-martial in advance, so that the colonel may not be embarressd in this regard), but by the terms of the seventy-second Article of War, division commanders are not authorized to appoint general courts-martial. The language of the article is: "Any general officer commanding the Army of the United States, a separate army or separate department shall be competent to appoint a gen-

eral court-martial, either in time of peace or in time of war." A military geographical division is not comprehended in this language. It is a well-known command, being neither an army nor a department.

In this connection it has been determined that while a colonel commanding a department may not pardon or mitigate the punishment adjudged by a general court-martial appointed by his predecessor (a general officer) in command of the department, yet it is held that he may confirm and execute the sentences of general courts-martial so appointed.

By the Articles of War rank and experience are the criterions in the exercise of authority on the subjects of courts-martial. Upon these principles, as well as by a fair construction of the Articles of War, it certainly requires equal authority in the officer who approves and confirms sentences of general courts-martial, as in the case of the officer who pardons or mitigates such sentences, and, in reason, the former is the more important duty, for the power to pardon or mitigate is clearly comprehended in the power to confirm and execute.

In my Annual Report for the year 1882 it was remarked:

> Most military offenders are not of the felonious or vicious class, the great majority being simply deserters, the offense of desertion in time of peace being merely a breach of contract for personal services, but to which the law attaches criminal liability. Men enlist and find the service to be totally different from what they imagined it to be. They find that nothing substantial can be spared for the assistance of dependent relatives, and at the first favorable opportunity abandon the service. The penalties now usually awarded for desertion—from two to five year's hard labor in prison, with dishonorable discharge, forfeiture of all pay, &c.—are too severe for this class of men.
>
> But while this is so, there are others who are known in the Army as chronic deserters, who are constantly vibrating between the company and the military prison. Such characters should be more severely dealt with and means devised to effectually exclude them from the service. The ordinary offense of desertion in time of peace is, in my judgment, generally too severely punished in our service. The severity of the punishment is clearly not proportioned to the criminal nature of the offense. But why should this be necessary in our Army in time of peace, when recruits can so readily be procured and retained in the service? The great railroad and other corporations in the country, which employ many thousands of men, rarely or never lose their men through desertion, but the employment, though often severe and hazardous, is sought, and when procured retained. Service as a soldier in the Army should be sought by able-bodied and vigorous men as a calling to honor and reward, instead of one from which such men flee by the thousand annually. There must be some defect in our military system, otherwise this would not occur. The pay and allowance of a soldier are about those of the ordinary unskilled laborer. It is believed, however, that a larger number of the artisan class enlist than of the unskilled-labor class, but these soon realize that the pay is insufficient and that the service is not just what was anticipated; hence they abandon it. In my judgment, while the pay as now fixed is ample for some, yet for the greater part of the enlisted men of the Army it is insufficient. I think a measure, if adopted, of a regular increase of pay from year to year for faithful services which at the end of five years' service would make the pay of a soldier, say, twenty-five or thirty dollars per month, would secure to the service trained soldiers, and, all things considered, at a cost greatly less than that incurred by the present system. Again, it is found that men enlist and desert either at the recruiting rendezvous or soon after reaching the depot of recruits. It would be well, therefore, in time of peace, to establish a probationary term for the recruit; that is, upon enlistment and transfer to the depot, if he finds, upon considering his new relation, that he would prefer his discharge, to grant the same upon his paying expenses, &c., incident to his enlistment. This would protect the Government and save the country a citizen. It is believed that a soldier in time of peace, under proper restrictions, should be accorded the right to buy his discharge from the service, by paying the necessary expenses and charges incident to his enlistment and assignment to a regiment. This principle was indeed recognized even in the emergency of a time of war, by the statutes authorizing persons drafted to furnish substitutes. I refer to this only as it relates to the question of discipline through judicial proceedings and of pardons, questions on which this Bureau is required to act under the law and regulations.

The General of the Army, in his last annual report to the Secretary of War, commenting on the subject of desertion, after stating the large

number of desertions from the Army and recommending an increase of pay as a preventative, remarked:

> The desertion of his comrades in danger is, and ever should be, construed as the basest and most heinous crime possible to a soldier, whereas of late years, under the benign influence of our Bureau of Military Justice, it has grown to be considered as of little more concern than for a laborer to quit his employer without leave or notice.

Certainly nothing that was said in my reports or in the opinions of this Bureau justifies such conclusion. I said in effect that desertion in time of peace, not in time of war or danger, was purely a statutory offense; that the punishment adjudged therefor in certain cases was too severe. No person will deny that desertion in time of war or danger is a heinous crime, being felony at common law, and is usually punishable with death in our service. I spoke of this offense, however, in my report entirely with reference to a time of peace and while the troops are lying in garrisons. While this Bureau feels complimented at commendations coming from the General, it feels that this mention of it is entirely undeserved, inasmuch as it is based on a total misapprehension of the facts, as will be seen by reference to the reports and opinions of this Bureau on the subject of desertion.

The ever-recurring frequency of desertion in time of peace shows that severity of punishment is no deterrent, in view of the severity of the punishment that has been imposed for that offense in our service with a view to prevent desertion. I ventured to offer a few suggestions which are believed to be sound in principle, and if carried out, desertion in our army, being now so demoralizing and disorganizing, would become a thing comparatively unknown. In this connection attention is invited to the following extract from my report of 1881:

> In reviewing court-martial proceedings, especially in cases of desertion, the prisoner very often is found to complain of ill-treatment at the hands of his superior officers, but more frequently at the hands of non-commissioned officers, and to attribute his desertion to that cause.
>
> This complaint of ill-treatment is found repeated and reiterated in hundreds of trials for desertion, and sometimes for other offenses.
>
> Whether the complaints be true or false, the opportunity which is offered a superior to oppress an inferior is very great, and tends to give credence to the complaint. In the interests of the officer or non-commissioned officer, therefore, if the complaint be false, or in the interests of the soldier and the service if true, some remedy, either by legislation or regulation, should be adopted that would effectually prevent the possibility of an abuse of authority.

A practice has obtained of late of trying enlisted men for trifling absences and neglects before general courts-martial, alleging in the specifications prior convictions of similar or even dissimilar offenses, so that by adding prior minor convictions to an offense trifling in itself the soldier may be dishonorably discharged from the service and confined for a term in the military prison. By the common law regulating crimes and criminal punishments this could not be done, but by modern legislation in England and in some of the States of the Union a heavier punishment is authorized by statute to be inflicted upon conviction of a repetition of the offense. There is, however, no statute of the United States authorizing this to be done by the criminal courts of the United States or by courts-martial, which are essentially criminal courts. This is an instance of attempting to hold the enlisted men of the army together and to their duty by fear of punishment and disgrace. By this means the very best soldiers may be dishonorably discharged and disgraced by omitting through accident or otherwise to promptly attend a few roll-calls in garrison. Several such instances have occurred. But the practice is unnecessary. In nearly all of the Articles of War under which enlisted men are prosecuted and tried the sentences that may be

adjudged are left to the discretion of the court. This system of alleging an aggregation of convictions for minor offenses may in some instances succeed in weeding some bad men out of the service, but its tendency will operate more to destroy merit than to uphold good discipline. In any event the matter belongs to Congress for proper legislation, and until that be had the prior and long-established practice ought to be adhered to.

A question as to the limitations to prosecutions (Article 103) for desertion (Artcle 47) has recently been before the United States circuit court, district of California, and the court held that a court-martial has exclusive jurisdiction to try a party duly enlisted in the Army for the offense of desertion, and that the limitation prescribed for the trial and punishment of that offense by the one hundred and third Article of War is matter of defense, and the tribunal having jurisdiction to try the charge of desertion is the tribunal having jurisdiction to determine whether the bar of the statute has attached or not. The court said:

> The fact of desertion being proved, if there is any legal ground or excuse, or exoneration of punishment, that is matter of defense. * * * A desertion having taken place, whether the statute of limitations has run against it and barred punishment, is matter of defense, and must be determined by the same tribunal which tries the charge.

This is the view held by this Bureau, which will be found fully set forth in a number of reports from this office, a few of which are quoted in my Annual Report to the Secretary of War for the year 1882, as follows:

> It has been repeatedly held by this Bureau that "the bar of the one hundred and third Article of War is like any other defense before a court-martial. If the prisoner would avail himself of its benefits he must plead and prove it, or he may prove it on the general issue of not guilty without specially pleading it; and if the court believe from the evidence adduced that the offense was committed more than two years before the issuing of the order for the trial, and that the prisoner was amenable to justice within that period, that is if the military authorities by reasonable diligence might have arrested him and brought him to trial within the lapsed period if they would, then the trial should be held to be barred within the meaning of the one hundred and third Article; if otherwise, the plea or showing of the prisoner should be held for naught." (See opinions of this Bureau on this subject of the 2d of August, 1881, and the 19th of January, 1882.)
>
> The bar of the one hundred and third Article of War, therefore [referring to a case cited in my report], being a matter to be established on the trial, will not be inquired into on *habeas corpus*.

The views of this Bureau respecting the burden of proof in showing the exceptions contained in the one hundred and third Article of War are sustained by the rulings of the Supreme Court of the United States in United States *vs.* Cooke (17 Wallace, 168), construing the statute of limitations in criminal prosecutions before the courts of the United States; that statute being substantially similar in its exceptions to those contained in the one hundred and third Article of War, but are denied, it would seem, by Attorney-General Wirt, in a brief opinion rendered in 1820 (1 Opinions, 383), in which he said: "I do not think it is competent to any individual to waive [the limitation] or that a court-martial can proceed to examine into offenses of more than two years' standing previous to the order summoning the court, unless the prosecutor can show that the party accused, by reason of absence or some other manifest impediment, had not been amenable to justice within the time limited by the rule."

Attorney-General Cushing (6 Opinions, 239) seems to admit the correctness of this opinion in a case before him, in which, however, the point was not directly raised; and see it referred to in 13 Opinions, 463, and in 14 Opinions, 267, 268. But it is submitted that the views of Attorney-General Wirt on this subject violate well-established principles of pleading and practice, and virtually nullify the exceptions in the article, especially in cases of desertion. Absence is the only impediment in cases of desertion. If the prosecution be required to follow up and show where the deserter has been during his absence, this would imply that it was within the power of the prosecutor to have brought him to trial within the exact period, and thus the exception would be ignored. Not one deserter in five hundred is found to go beyond the limits of the United States, yet it is believed that the prosecutor in very few of the

numerous cases of desertion, where more than two years have elapsed between the desertion and trial thereof, could trace by satisfactory evidence the exact whereabouts of the deserter during absence; and if he undertook to do so the expense of the investigation would be so large as to virtually defeat the ends of justice. How, then, should the matter be ascertained but by the showing of the party accused? He must be the best informed as to his whereabouts during his absence; and upon that showing—giving the prosecutor the right to reply—the court should determine whether or not he was amenable to trial during the lapsed period.

It is maintained that there is no limitation to prosecutions for desertion, but it was further remarked in my report of 1882 that—

It is a fundamental rule that statutes of limitations in criminal matters apply to all cases not expressly excepted.

The forty-eighth Article of War, relied upon as taking the offense of desertion out of the purview of the one hundred and third Article of War, reads as follows: "Every soldier who deserts the service of the United States shall be liable to serve for such period as shall, with the time he may have served previous to his desertion, amount to the full term of his enlistment, and such soldier shall be tried by court-martial and punished, although the term of his enlistment may have elapsed previous to his being apprehended and tried."

The one hundred and third Article reads as follows:

"No person shall be liable to be tried and punished by a general court-martial for any offense which appears to have been committed more than two years before the issuing of the order for such trial, unless, by reason of having absented himself or of some other manifest impediment, he shall not have been amenable to justice within that period."

This article is a re-enactment of the eighty-eighth Article of War of the code of 1806, and manifestly there is no exception therein as to the offense of desertion.

The forty-eighth Article of War is a re-enactment of the eighteenth section of the act of March 16, 1802 (2 Stat., 136), and although this act of 1802 has been successively re-enacted in the acts of 1812–'13 (2 Stat., 673, 796), yet up to the revision of the statutes in 1873 the early act of 1802 was solely relied on for the purpose. (See it embodied in the various editions of the Army Regulations up to 1863.)

The statute, it will be seen, was in force when the eighty-eighth Article of War was adopted, and it may be accepted as certain if it had been intended to except desertion from the universal rule established by that article, it would have been so provided. So far as both articles relate to the offense of desertion, they are laws *in pari materia*, and must be so construed with reference to each other. The first clause of the forty-eighth Article of War relates solely to the punishment that may be inflicted on a deserter, that is, making good lost time, and is not inconsistent with the limitations of the one hundred and third Article. Yet the requirement to make good lost time cannot in strictness be considered as a punishment, but rather a performance of that which the soldier solemnly agreed to perform by his contract of enlistment. The second clause of the forty-eighth Article—providing that the soldier may be tried and punished though his original term of enlistment may have expired—continues his liability to trial beyond the expiration of his original enlistment (unless he shall have in the mean time been amenable to justice), because the article says that he may be tried and punished for the desertion, although the term of his enlistment may have elapsed previous to his being apprehended and tried. Desertion, then, is a continuing offense during the enlistment and beyond its expiration subject to the limitation fixed by the one hundred and third Article.

I have here, as in my report of last year, devoted some attention to this subject, because of the efforts that have been made for the past five years to amend the one hundred and third Article, upon the understanding that it was defective with respect to prosecutions for desertion, and because of the great incongruity of practice and procedure now obtaining before courts-martial in prosecutions for desertion. The views I entertain of the operation of the one hundred and third Article of War obviate, of course, any amendment of it, that article being, in my judgment, ample in its present form to ensure justice and discipline in the Army if the course of procedure above set forth be followed, and which has been approved by the courts of the United States in every instance they have been called upon to consider the subject.

The man in whose case the circuit court for California held the language above quoted having been remanded to the military authorities

for trial for desertion, and having been brought before a court-martial for trial, interposed the bar of the one hundred and third Article of War (statute of limitations) as a defense, but the court-martial having declined to accept such defense, its proceedings were for this reason disapproved by the Department commander, who declared in doing so that he followed the principles enunciated by the circuit court in the case above quoted from. (*In re* Arno White, United States circuit court, district of California, before Field, circuit justice, and Sawyer, circuit judge, July 24, 1883.)

The Adjutant-General's Office exercising some supervision over courts-martial (whether rightfully or not will not here be inquired into), thereupon dispatched the following letter to the department commander:

WAR DEPARTMENT, ADJUTANT-GENERAL'S OFFICE,
Washington, August 25, 1883.

GENERAL: The attention of this office has been called to your General Court-Martial Orders No. 70, current series, promulgating the findings and sentence in the case of Private Arno White, Company K, Eighth Infantry, and particularly to section II, in which the reasons for your disapproval of the proceedings, findings, and sentence are concisely set forth.

Without assuming to reflect in any manner upon your action in this matter, I deem it important that your attention be called to the ruling of the Department regarding the proper construction of the one hundred and third Article of War as laid down by Secretary Cameron under date of January 20, 1877, and confirmed by every succeeding Secretary of War since that date, including the present incumbent, who, it is proper to remark, was aware at the time of confirming the rule of the decision of Judge Choate in the Davidson case, to wit:

"That the old interpretation of the late eighty-eighth, now one hundred and third, of the Rules and Articles of War, under which a deserter might be tried by a court-martial without regard to the length of his absence, notwithstanding the limitation clause in the said article, shall continue to be in force."

If this office understands the language of the United States district court for the district of California in White's case, it is there clearly expressed that questions arising "on the facts" are within the jurisdiction of the military court, and outside the jurisdiction of the civil courts on *habeas corpus*, and on that point its views are reflective of the ruling of the United States circuit court for the southern district of New York in Davidson's case.

However this may be, this office conceives it most material to the proper administration of discipline in the Army that courts-martial should be unaffected by the opinion of civil courts in their action upon the military statute of limitations when introduced in bar of trial, and bound only by their oath, which requires them in the presence of doubt to act according to their conscience, the best of their understanding, and *the custom of war in like cases*.

Attention is also invited in this connection to the fact that the views on this subject as published in the Digest of the Judge-Advocate-General, prepared by Major Winthrop while on duty in that office, are not only not the views of the Department, but were disapproved by the Secretary of War, as being contrary to the best interests of the service. (See also General Orders No. 3, Headquarters of the Army, Adjutant-General's Office, series of 1881.)

I am, general, very respectfully, your obedient servant,

CHAUNCEY McKEEVER,
Assistant Adjutant-General, in Charge.

Maj. Gen. J. M. SCHOFIELD,
Commanding Department of California, San Francisco, Cal.

Official copy respectfully furnished the Judge Advocate-General of the Army for his information.

This remarkable letter notifies courts-martial that they are the sole and final judges of matters brought before them untrammeled by any ruling or decision of a circuit court of the United States or other judiciary authority.

The conflict of views between the circuit court and the Adjutant-General's Office seems to have brought about the following anomalous

procedure in the Department of California in cases of desertion committed more than two years before trial:

HEADQUARTERS DEPARTMENT OF CALIFORNIA,
Presidio of San Francisco, Cal., August 21, 1883.

Respectfully returned to the assistant adjutant-general, Department of California with the recommendation that the within charge and specification, *as amended*, be approved and referred for trial to a general court-martial.

The desertion in this case is apparently barred from prosecution by the statute of limitations, as interpreted in recent orders.

But a desertion includes a "*continuing offense*" of *absence without leave* committed on every day of the period of the absence. In order that the soldier may not go free of trial and punishment if guilty, he has therefore been, by direction of the department commander, charged with an *absence without* leave during a portion (not over two years) of the entire unauthorized absence.

W. WINTHROP,
Judge Advocate.

In my report for the year 1881 it was also remarked:

The ninety-first Article of War provides in certain contingencies for the reading in evidence of the depositions of witnesses before courts-martial in cases not capital. These depositions were taken at or near the time when the offense was committed, when practicable to do so, directly in the presence of the prisoner, so that he might cross-examine the witness if he would, and to be used in the trial, in the contingency that the case is not capital, and where it is shown to the satisfaction of the court that the witness is dead, or is so ill as not to be able to travel, or if he is kept out of the way by the accused, or is insane, or is residing beyond the limits of the State, Territory, or District in which the court may be ordered to sit, the administration of military justice would be greatly promoted by amending the law accordingly. The importance of this amendment of the law will be seen when it is considered that the territorial jurisdiction of a court-martial is so extended that a military offense committed in Maine may be brought to trial before a court-martial sitting in Oregon, rendering it difficult, if not impossible, at times to obtain the *viva voce* testimony of material witnesses.

To this I would add the further recommendation that when depositions are necessary to be taken on interrogatories at the time of trial the interrogatories should be addressed to an officer of the Army near the place where the witnesses reside, who should be authorized to take the depositions and to administer oaths for the purpose, returning the depositions when completed to the court. The ninety-first Article of War does not direct before whom depositions shall be taken. A court-martial sitting at a great distance from the place where witnesses are found to reside whose depositions on interrogatories are desired is at a loss and is not in a position to know before whom such depositions may be taken. Commissioned officers are now authorized to administer the oath of enlistment to recruits, and their powers in this respect should be enlarged so that depositions to be used before courts-martial or other military tribunals may be taken before them, with authority to compel the attendance of witnesses and to punish for disobedience of their process. In this connection I would invite attention to a recommendation contained in my annual report for 1881, namely:

The authority conferred upon the judge-advocate of a court-martial by section 1202 of the Revised Statutes, "to issue the like process to compel witnesses to appear and testify which courts of criminal jurisdiction within the State, Territory, or District where such military courts shall be ordered to sit may lawfully issue," should be penally sanctioned. While the judge-advocate may issue the process, there is no statutory authority to punish disobedience thereof. Witnesses not in the military service are now induced to attend solely by reason of a liberal compensation, much exceeding that paid by any criminal court, whether State or national. As a matter of economy, then, if not of justice, power to punish reluctant and disobedient witnesses should be conferred by statute upon courts-martial or upon the judge-advocate thereof.

In my annual report of 1882 it was further remarked:

Large numbers of applications for the mitigation of the sentences of military courts are referred here for report. These applications find their way to this Bureau sometimes direct from the prisoner or his friends or through the Secretary of War or the Adjutant-General. This Bureau makes up a full report in the case from the record of the trial filed therein, stating the nature of the offense, the circumstances connected with its commission, the sentence imposed, and a brief opinion on the merits of the whole case as presented in the application for clemency, and as appears from the record of the trial. This Bureau is then required to transmit its report to the Adjutant-General, who is presumed thereupon to submit it to the Secretary of War. Formerly such reports were submitted direct to the Secretary of War by the Judge-Advocate-General, but latterly the practice has varied and alternated between the Judge-Advocate-General and the Adjutant-General. At one time the Adjutant-General was required to refer such information as the records of his office contained in the case to the Judge-Advocate-General, who would then report and submit the case for the consideration of the Secretary. This was the more reasonable and logical rule, for the Adjutant-General has merely the custody of the documents evidencing enlistments or engagements to service, while this Bureau has not only these data in the case (which are always established at the trial), but the entire record of the conviction.

It is recommended that the reports of this Bureau, with all accompanying papers and documents, after being acted upon by the Secretary, be returned to this office for file with the record of the court. In most of the cases reported upon, this office is not informed as to the nature of the action finally taken. This office is the repository appointed by law for all proceedings of courts-martial; therefore all subsequent proceedings or action affecting a case should be filed away with the record of proceedings of the court. Both convenience and economy and the prompt dispatch of business demonstrate the propriety of this recommendation.

This Bureau is also called upon to examine and report upon va ed classes of claims against the Government, such as claims foun ed upon services rendered and supplies furnished the Army during the late war, and since, other than quartermaster and commissary's supplies, but occasionally such claims are referred for report to this office; claims on account of organizing, arming, and equipping volunteers and militia during the late war; claims founded on titles to lands embraced within military reservations, &c. Although the act of March 3, 1883, provided for reference to the Court of Claims of a claim or matter involving controverted questions of fact or law, still it is always a question to ascertain and determine if a claim involve such issues, so that the settlement of just claims may not be unnecessarily delayed.

The clerical force allowed this office during the past two years is entirely inadequate to perform the duties assigned to it. While the clerical force in other Bureaus and offices of the War Department has been increased, the force of this office has been decreased, not alone in clerks of the higher order of attainments, but in copyists; and when sickness and necessary absence of clerks are considered, the remark contained in my last report is proper to be here repeated, namely:

Of the force of clerks estimated for—over and above the small force allowed in the past fiscal year—to take the place of two Judge-Advocates relieved and assigned to duty in the departments, and to assist in claims and pension searches, &c., but one clerk of class 1 was allowed, and the three copyists hitherto employed in this Bureau were reduced in number to one. The consequence is that work now in the office, which ought to be attended to within a reasonable time must be delayed indefinitely. Applications for copies of records, some of an urgent nature, now awaiting attention, would require the employment of three clerks for more than six months, even if no more applications for copies were received in the mean time. With but one copyist to do this work the inconvenience to parties is apparent.

It is earnestly requested that the force of clerks estimated for this office for the ensuing fiscal year, being that allowed it by the general law (section 215 of the Revised Statutes, and page 46, paragraph 23, of the Supplement to the Revised Statutes), will receive your earnest recommendation to Congress, and be allowed.

It is also recommended that authority be given for the employment of special copyists in this office, to be compensated by the folios copied, as heretofore.

The apartments assigned to this office have for some time been very much crowded, and recently they have been rendered more so. The room which was occupied by myself was taken during my temporary absence and assigned to the Chief of Ordnance. An examination of the Ordnance Office would show that that office is not any more in immediate need of office room than is this office. Both offices have for years occupied adjacent apartments. The mass of records now received for file in this office it is believed is more voluminous and bulky than that received in the Ordnance Office or any other Bureau of the War Department, thus requiring a constantly increasing space, and any decrease of such space necessarily causes crowding and inconvenience.

The officers of the corps of Judge-Advocates are stationed as follows:

Maj. Guido N. Lieber, on duty in this Bureau.

Maj. William Winthrop, Military Division of the Pacific and Department of California, Presidio of San Francisco, Cal.

Maj. H. B. Burnham, Headquarters Department of the Platte, Omaha, Nebr.

Maj. Thomas F. Barr, in the office of the Secretary of War.

Maj. Herbert P. Curtis, professor of law, Military Academy, West Point, N. Y.

Maj. Henry Goodfellow, Headquarters Department of the Missouri, Fort Leavenworth, Kans.

Maj. A. B. Gardner, Headquarters Division of the Atlantic and Department of the East, Governor's Island, New York Harbor.

Extracts from the reports of Judge-Advocates of departments and of officers acting and performing the duties of those officers, embodying recommendations on various matters on the subject of the administration of military justice, are hereto appended, and with this report are respectfully submitted.

D. G. SWAIM,
Judge-Advocate-General.

Hon. ROBERT T. LINCOLN,
Secretary of War.

REPORT OF THE QUARTERMASTER-GENERAL.

WAR DEPARTMENT,
QUARTERMASTER-GENERAL'S OFFICE,
Washington, October 6, 1883.

SIR: I have the honor to submit the annual report of the operations of the Quartermaster's Department during the fiscal year ending June 30, 1883.

The balance in Treasury to credit of the Quartermaster's Department at end of June 30, 1882, was, as by last report		$1,182,239 65
Appropriations for the fiscal year for service of the Quartermaster's Department were, in gross (act June 30, 1882)		11,375,000 00
Appropriations for deficiences for 1881-'82 and for prior years (act August 5, 1882)		1,189,153 96
Appropriations for deficiencies for 1882-'83 and for prior years (act March 3, 1883)		317,867 78
Appropriations for service of the Quartermaster's Department (acts July 3, 11, and August 7, 1882)		424,825 21
Amounts deposited to credit of appropriations and received from sales to officers of public property		562,768 94
Total		15,051,855 54
Remittances to disbursing officers have amounted to	$11,862,779 41	
Requisitions to pay settlements made by Treasury and to pay claims and accounts	1,184,757 17	
Transferred under act of August 5, 1882, for payment of salaries of civilians employed in lieu of general service or detailed enlisted men	101,652 50	
Carried to surplus fund, act June 20, 1874	607,387 45	
		13,756,576 53
Leaving balance in Treasury undrawn at end of June 30, 1883		1,295,279 01

Tables accompany this report, giving the amount of the various items of appropriations, remittances, &c., in detail.

The Quartermaster's Department is charged with the duty of providing the means of transportation by land and water for all troops and all material of war, and transports freight for other executive departments when requested to do so, for which the appropriation of the Quartermaster's Department is reimbursed; provides wagons and ambulances and harness, except for cavalry and artillery horses; builds or charters ships, steamers and boats, docks, and wharves; constructs and repairs roads, railways, and bridges; clears out obstructions in rivers and harbors when necessary for military purposes. It provides and distributes clothing, tents, and equipage, fuel, forage, stationery, lumber, straw for bedding for men and animals, and all material for camps and for shelter of troops and stores; furniture for offices and for barracks, such as bunks, benches, chairs, tables, and lockers; heating and cooking stoves for use in public barracks and quarters; tools for mechanics and laborers in the Quartermaster's Department; lights for all military posts and buildings. It builds barracks, quarters, store-houses, and hospitals; provides, by hire or purchase, grounds for military encampments and buildings; supplies periodicals and newspapers, or school-books in lieu of periodicals, if desired, to the post libraries for the use of enlisted men.

During the year over two hundred officers of the line have been performing duty as acting assistant quartermasters, and as such were charged with the responsibility for public property, and most of them with the disbursement of public funds. For this extra accountability

of property and money the customary sum allowed acting assistant commissaries of subsistence for care of provisions (under act of July 15, 1870), namely, $100 per annum, should be allowed, and the unjust discrimination against acting assistant quartermasters thus abolished.

At present not only the officers serving in the Quartermaster's Department are required so assume this extra responsibility without pay pertaining properly thereto, but the enlisted men also detailed as clerks to assist them in lieu of civilian ones are now obliged to work without pay "on constant labor of more than ten days." The laborer is worthy of his hire, more especially in this instance, involving no little responsibility and calling for valuable attainments and qualities in the enlisted men.

A lieutenant of the Army detailed to do duty in the Quartermaster's Department and required to become responsible for property, should be furnished with a competent enlisted clerk, and a man who, besides being a clerk, shall have some authority over the enlisted men with whom the officer and his attachés are brought in contact. There is no better nor more economical method thus far devised than that of the appointment of an enlisted man as post quartermaster-sergeant, who shall be *experienced as a clerk in the Quartermaster's Department* and capable of superintending issues of quartermaster's property. The Army has ordnance sergeants, hospital stewards, and commissary sergeants, and should have quartermaster's sergeants, especially *at posts where there is not a regular quartermaster.*

Upon this subject the late distinguished Quartermaster-General M. C. Meigs truly remarks:

> The want of post quartermaster-sergeant still continues to be felt, and I am requested by officers who have the good of the service at heart to again recommend that their appointment be provided for.
>
> The acting assistant quartermaster, who is in charge of the military property of the Quartermaster's Department at any military post, as a rule, leaves the post whenever the garrison is exchanged or removed, and the sudden transfer of property, often of great value, is attended with risk of loss to the officers.
>
> A post quartermaster-sergeant who would remain at the post would be able to save officers and the Government loss which results from such sudden and frequent changes. This care of supplies would prevent useless transportation and wastage. The value of the service of ordnance and commissary sergeants is well established by experience; but the Quartermaster's Department, whose property at military posts generally exceeds in value all others combined, is without these useful non-commissioned officers.

It is recommended that to every permanent post, garrisoned by not less than two companies, a quartermaster-sergeant, selected by examination from such of the enlisted men of the line of the Army as are competent clerks, be appointed by the Secretary of War, at his discretion, on the recommendation of the Quartermaster-General. It is further recommended that one enlisted clerk be allowed each post quartermaster, who shall be entitled to thirty-five cents extra pay per diem while thus detailed and actually performing the duty of clerk.

In support of these recommendations attention is invited to page 435 of the inspection branch report.

DUTIES OF OFFICERS.

Brig. Gen. Rufus Ingalls, Quartermaster-General, U. S. A., Quartermaster-General's Office.

Lieut. Col. A. J. Perry, deputy quartermaster-general, is on duty in this office in charge of the finance, clothing supply, and inspection branches, and of the examination of officers' accounts and returns.

Lieut. Col. J. G. Chandler, deputy quartermaster-general, is on duty in this office in charge of the transportation, regular supplies, and miscellaneous claims branches.

Maj. B. C. Card, quartermaster, is on duty in this office in charge of the claims branch.

Lieut. Col. R. N. Batchelder, deputy quartermaster-general, is in charge of the general depot of the Quartermaster's Department and office of National Cemeteries at Washington, D. C.

Col. S. B. Holabird, assistant quartermaster-general, U. S. A., is in charge of the general depot of the Quartermaster's Department at Philadelphia, Pa.

Col. C. H. Tompkins, assistant quartermaster-general, is chief quartermaster Military Division of the Missouri, and depot quartermaster at Chicago, Ill.

Col. J. A. Ekin, assistant quartermaster-general, is in charge of the general depot of the Quartermaster's Department at Jeffersonville, Ind.; also disbursing officer of the Quartermaster's Department and in charge of National Cemeteries in Kentucky and Tennessee, at Louisville, Ky.

Col. Rufus Saxton, assistant quartermaster-general, is chief quartermaster Military Division of the Pacific and Department of California, at Presidio of San Francisco, Cal.

Lieut. Col. J. D. Bingham, deputy quartermaster-general, is chief quartermaster Department of the Missouri, at Fort Leavenworth, Kans.

Lieut. Col. Henry C. Hodges, deputy quartermaster-general, is in charge of the general depot of the Quartermaster's Department at New York City.

Lieut. Col. William Myers, deputy quartermaster-general, to October 20, 1882, was on duty as chief quartermaster Department of Dakota, Fort Snelling, Minn. From October 20, 1882, he was on leave of absence on surgeon's certificate until he retired from active service March 15, 1883.

Lieut. Col. Chas. G. Sawtelle, deputy quartermaster-general, is chief quartermaster Military Division of the Atlantic and Department of the East, at Governor's Island, New York Harbor.

Lieut. Col. James J. Dana, deputy quartermaster-general, is chief quartermaster Department of the South, at Newport Barracks, Ky.

Lieut. Col. M. I. Ludington, deputy quartermaster-general, was chief quartermaster Department of the Platte, at Omaha, Nebr., to March 31, 1883. He was on leave of absence from November 19, 1882, until May 15, 1883. From May 16, 1883, he was on temporary duty in the Quartermaster-General's Office.

Maj. James M. Moore, quartermaster, was on duty in office of the Quartermaster-General to May 26, 1883. From May 27, 1883, to May 31, 1883, he was en route to headquarters Department of Dakota, and from June 1, 1883, chief quartermaster Department of Dakota, at Fort Snelling, Minn.

Maj. Charles A. Reynolds, quartermaster, to October 6, 1882, was awaiting orders. From October 6 to 18, 1882, he was en route to Atlanta, Ga. From October 18, 1882, in charge of National Cemeteries in Georgia and adjoining States, at Atlanta, Ga.

Maj. George B. Dandy, quartermaster, to March 28, 1883, was depot quartermaster at Saint Louis, Mo., and from March 31, 1883, chief quartermaster Department of the Platte, at Omaha, Nebr.

Maj. George H. Weeks, quartermaster, is in charge of general depot of the Quartermaster's Department at San Francisco, Cal.

Maj. William B. Hughes, quartermaster, is on duty in the general

depot of the Quartermaster's Department at Philadelphia, Pa., in charge of transportation, &c.

Maj. A. G. Robinson, quartermaster, is disbursing quartermaster district of Montana, Helena, Mont.

Maj. E. D. Baker, quartermaster, was chief quartermaster Department of Columbia, at Vancouver Barracks, and in charge of depot at Vancouver, W. T., to January 25, 1883, when he died.

Maj. J. G. C. Lee, quartermaster, is chief quartermaster Department of Texas; also from January 2, 1883, in charge of depot at San Antonio, Texas.

Maj. James Gilliss, quartermaster, is post quartermaster and quartermaster of Artillery School at Fort Monroe, Va.

Maj. T. J. Eckerson, quartermaster, is depot quartermaster at Boston, Mass.

Maj. A. J. McGonnigle, quartermaster, is chief quartermaster Department of Arizona, Whipple Barracks, Ariz.

Maj. E. B. Grimes, quartermaster, is assistant to chief quartermaster Department of the Missouri, Fort Leavenworth, Kans.

Maj. James W. Scully, quartermaster, to August 5, 1882, was post quartermaster at Fort Thomas, Ariz.; from August 10 to 19, 1882, en route to headquarters Military Division of the Atlantic, and from August 28, 1882, on duty at Fort Adams, R. I., as post quartermaster.

Maj. Charles W. Foster, quartermaster, is depot quartermaster at Baltimore, Md.

INSPECTION BRANCH.

This branch of the office keeps the records and correspondence relating individually to officers of the Quartermaster's Department or to officers doing duty therein, and to clerks and agents and others employed in the Quartermaster's Department, and of those on duty or employed in the Quartermaster General's Office.

Miscellaneous literature, such as Harper's and other magazines, scientific and military journals, newspapers, &c., have been supplied the military post libraries to the value of about $8,750.

One hundred and forty-five thousand and fifty-nine general orders and circulars have been received and 105,773 have been distributed.

The report of the inspection branch of the office shows the existing organization of the Quartermaster's Department in detail and the duties upon which the officers are engaged.

BARRACKS AND QUARTERS.

The construction of 90 new buildings, such as barracks, quarters, stables, storehouses, guard-houses, &c., have been authorized at an estimated cost of $147,178. They are at military posts in 9 States and 8 Territories.

Repairs to existing buildings have been authorized at an estimated cost of $452,559.

The expenditures on account of the construction and repairs have been distributed as follows:

The cost of new buildings in Department of the East is stated at	$4,967
Repairs	97,293
Department of the South, new buildings	11,017
Repairs	13,798
Total Division of the Atlantic	127,075

Department of the Missouri, new buildings	$9,574
Repairs	136,265
Department of the Platte, new buildings	23,822
Repairs	38,037
Department of Dakota, new buildings	22,896
Repairs	57,407
Department of Texas, new buildings	7,593
Repairs	25,608
Total Division of the Missouri	321,202
Department of California, new buildings	4,473
Repairs	32,443
Department of the Columbia, new buildings	31,990
Repairs	29,344
Department of Arizona, new buildings	30,846
Repairs	22,364
Total Division of the Pacific	151,460

Of the above sum the Secretary of War, under section 1231, Revised Statutes, authorized buildings to be erected or fitted up for school and religious purposes at the following posts:

Fort Trumbull, Conn	$1,136
Fort Walla Walla, Wash	208
Fort Wingate, N. Mex	1,500
Fort Stanton, N. Mex	1,500
Total	4,344

WHARVES.

Improvements of wharves have been authorized at—

Jackson Barracks, La	$4,064
Angel Island, Cal	1,927
Fort Stevens, Oreg	2,164
Willets Point, N. Y	1,120
Fort Barrancas, Fla	1,296
Alcatraz Island, Cal	7,811
Total	18,382

WATER AND SEWERAGE.

Fifty-one thousand eight hundred and fifty-two dollars have been authorized for improving the water supply and system of sewerage at 21 military posts.

SPECIAL PROJECTS AUTHORIZED BY CONGRESS.

For new buildings for officers' quarters at Fort Apache, Ariz	$13,928 44
For replacing the barracks at Fort Leavenworth, Kans., burned February 1, 1883	18,745 77
For completing new barracks at Fort Leavenworth, Kans	47,000 00
For erection of additional officers' quarters at Fort Leavenworth, Kans	41,211 00
For completing the post of Fort Maginnis, Mont	25,000 00
For erection of a quartermaster's and commissary depot building at Saint Paul, Minn	48,500 00

The sundry civil bill of March 3, 1883, granted for the enlarging and construction of such military posts as in the judgment of the Secretary of War he may deem necessary, the sum of $200,000.

The Secretary of War distributed it as follows:

Fort Colville, Wash	$50,000 00
Fort Bliss, Tex	10,000 00
Fort Douglas, Utah	19,000 00
Fort Omaha, Nebr	10,999 10
Fort Bridger, Wyo	33,500 00
Fort Thornburgh, Utah	1,500 90
Fort Huachuca, Ariz., Fort Grant, Ariz., Fort Apache, Ariz	75,000 00
	200,000 00

HOSPITALS.

For the construction and repair of hospital buildings $74,968 have been authorized to be expended as follows:

Department of the Platte	$6,104 00
Department of the Missouri	13,330 00
Department of Dakota	17,408 00
Department of Texas	595 00
Total Division of the Missouri	37,437 00
Department of California	1,211 00
Department of Arizona	8,487 00
Department of Columbia	8,560 00
Total Division of the Pacific	18,258 00
Department of the South	5,897 00
Department of the East	13,376 00
Total Division of the Atlantic	19,273 00

HOSPITAL AT HOT SPRINGS, ARK.

Congress, by act of June 30, 1882, appropriated $100,000 for the erection of an Army hospital at Hot Springs, Ark., upon the United States reservation, which shall be under the direction of the Secretary of War. The law has been complied with so far as the preparation of plans and specifications are concerned, and the work, after advertisement, has been begun. The price agreed to be paid is $86,335, the lowest bid received for the work.

TRANSFER AND SALE OF BUILDINGS.

The sale of 106 buildings located in Maine, Florida, Louisiana, Tennessee, Texas, Wyoming, Utah, and Colorado has been authorized.

The act of April 7, 1882, authorized the Secretary of War to sell the military barracks and the lands upon which they are located in the city of Savannah, Ga., and in accordance therewith he has ordered the property to be advertised, the sale to take place November 15, 1883. It is appraised at $67,381.88.

The buildings at old Fort Thornburgh have been transferred to the Interior Department, the marine-hospital building at Saint Mark's, Fla., to the Treasury Department, and the buildings at Camp Russell, near Raleigh, N. C., to the State authorities.

MILITARY SITES IN TEXAS.

In 1875 Congress appropriated $25,000 for the purchase of the site of Fort Brown, Texas, and $10,000 for the purchase of the site of Fort Duncan.

The owners of the Fort Brown site declined to sell for the amount appropriated, and the War Department has held since 1880 that the site was of little importance and, so far as known to this office, nothing further has been done in regard to it.

The owner of Fort Duncan also declined to receive the sum appropriated for purchase of his property, and his price has steadily increased until it recently reached some $36,000. The price being considered exorbitant by the War Department, orders have been given for its abandonment.

On April 16, 1880, Congress appropriated $200,000 for acquiring sites and erecting suitable posts in Texas for the protection of the Rio Grande frontier. Under this law, as modified by act of June 30, 1882, the Secretary of War has authorized the purchase of Fort Davis site for $23,500; grounds at San Antonio, $41,742.20; and site at Camp Rice, $2,370. Favorable opinion has been rendered by the Department of Justice in the case of the title to the San Antonio land and for part of the site of Camp Rice. The title papers to Fort Davis have not reached this office.

POST CEMETERIES.

Eight thousand and eighty dollars have been authorized to be expended in care and maintenance of post cemeteries.

FIRES.

The losses by fire during the year have been: One set of officers' quarters at Vancouver Barracks, Wash.; a bakery and post trader's building at Fort Maginnis, Mont.; shop and engine building and noncommissioned staff officers' quarters, old, at Fort A. Lincoln, Dak., and a shed and certain quartermaster's property at the Washington depot in this city.

MILITARY RESERVATIONS.

A military reservation was declared by the President at Fort Supply, Ind. Ter., January 17, 1883, boundaries enlarged, and the following reservations were transferred to the Department of the Interior: Fort Benton, Mont., January 5, 1883; Fort Brooke, Fla., January 4, 1883; Fort Larned, Kans., March 26, 1883, and Fort Hall, Idaho, June 11, 1883.

For full particulars in relation to barracks and quarters and accounts attention is respectfully invited to the report herewith of Col. A. J. Perry, assistant quartermaster-general, in charge of those branches.

QUARTERING TROOPS.

In regard to quartering troops, the necessity for so many small and scattered military posts is fast diminishing, inasmuch as the Indians are collected on permanent reservations; at the same time the necessity for larger permanent posts near Indian reservations and frontiers is increasing. For these reasons it will add greatly to the economy of maintenance of troops and to their efficiency if they can be assembled at important points in larger and more permanent garrisons. To do this will require special appropriations from Congress; for that reason several important special estimates have been presented to which attention is respectfully invited.

DAVID'S ISLAND, NEW YORK HARBOR.

The important recruiting depot and training school for recruit David's Island, near New York City, needs an immediate appropria to replace old, dilapidated, and unsuitable buildings; the sum of $120, or thereabouts is needed to begin the work. It is not necessary to anything about the importance of this work to any one at all infor upon these great public matters. It is well known to be a worl pressing national necessity.

JEFFERSON BARRACKS, MO.

It has been found that the buildings at Jefferson Barracks, on Mississippi River, near Saint Louis, which are old and have been l used as barracks, have become extremely unhealthy for the recruits lected there and trained for the Army. If that post is to continu use for that purpose, it has been represented that new buildings ar quired to be constructed upon ground hitherto unused, which sho be first thoroughly underdrained and then built upon. One hund thousand dollars will be required to begin the work of rebuilding post and bringing it into a proper sanitary condition for its contin use as a recruiting depot and training school for young recruits for Army.

TRANSPORTATION.

Transportation was provided by rail, water, wagon, and stage 65,166 persons, 6,279 animals, and 118,935 tons of material, costing reported, $2,149,051.49, of which $414,908.84 was paid for transpo tion of persons, $901,663.23 for the transportation of live stock freight, and $384,322.35 on accounts not strictly chargeable eithe passenger or freight transportation, leaving $448,157.07 on outstand accounts not settled at the close of the fiscal year.

The expenses of military transportation not paid out of the regu appropriation comprise that provided over bonded Pacific railroads value $845,144.46, which is credited at the Treasury Department on debts of those railroads, and that provided over land grant railroa to which 50 per centum of tariff rates is paid under act of Congres June 30, 1882, making special appropriation of $125,000 for that p pose, all of which will probably be needed to pay for such service.

The larger movement of troops were:

Third Artillery.—Company F, from Department of the South to partment of Texas.

Fourth Artillery.—Company F, from Department of the East to partment of Dakota.

Fifth Artillery.—Company D, from Department of the East to partment of the Platte.

Seventh Infantry.—Headquarters and ten companies from Departm of Dakota to the Department of the Platte, costing $27,394.25.

Twelfth Infantry.—Headquarters and ten companies from Departm of Arizona to Department of the East, costing $47,443.57.

Fifteenth Infantry.—Headquarters and ten companies from Dep ment of the Missouri to Department of Dakota, costing $35,801.47.

Twenty-second Infantry.—Headquarters and ten companies from partment of Texas to Department of the Missouri, costing $37,053.

RAILROAD TRANSPORTATION.

Thirty thousand two hundred persons, 5,459 animals, and 76,346 tons of material were transported by rail at a cost to the appropriation for transportation of the Army of $967,031.30; $845,144.46 was also credited on account of indebtedness to bonded Pacific railroads, and $125,000 paid out of special appropriation to land-grant railroads, making the total cost of railroad transportation furnished the Quartermaster's Department during the year $1,937,175.76.

BONDED PACIFIC RAILROADS.

The following tables state the military transportation during the fiscal year on the several railroads named:

Names of companies.	Number of persons transported.	Number of animals transported.	Pounds of freight transported.
Union Pacific (branches and leased lines)	6,748	1,756	55,391,373
Central Pacific (branches and leased lines)	849	605	30,093,076
Sioux City and Pacific	1,351	190	2,279,202
Total	8,948	2,551	87,763,651

The cost of this service is stated as follows:

Names of companies.	Amount of accounts referred to Treasury for settlement.	Estimated amount of accounts not rendered.	Proportion inuring for troops.	Proportion inuring for stores.	Total amount.
Union Pacific	$370,561 09	$123,908 72	$127,508 80	$366,961 01	$494,469 81
Central Pacific	215,577 72	120,386 27	88,185 74	247,778 25	335,963 99
Sioux City and Pacific	2 65	14,708 01	6,565 38	8,145 28	14,710 66
Total	586,141 46	259,003 00	222,259 92	622,884 54	845,144 46

In addition, accounts for telegraphic service rendered by the Union Pacific Railroad Company, amounting to $1,678.60, were filed in this office, making the total amount inuring to the Union Pacific Railroad Company $496,148.41.

Of the amount of $845,144.46 inuring to these roads, the proportionate amounts accruing over the subsidized and unsubsidized portions of the respective roads are estimated as follows:

Name of company.	Total amount.	Subsidized.	Unsubsidized.
Union Pacific	$494,469 81	$454,955 66	$39,514 15
Central Pacific	335,963 99	68,626 79	267,337 20
Sioux City and Pacific	14,710 66	3,538 88	11,171 78
Total	845,144 46	527,121 33	318,023 13

The following is a statement of unsettled accounts of these railroads at the close of the fiscal year:

Names of companies.	In Treasury.	In Q. M. G. O.	Total.
Union Pacific	$1,333,759 15	$1,678 60	$1,335,437 75
Kansas Pacific	79,001 17	.....	79,001 17
Central Pacific	93,718 13	.....	93,718 13
Sioux City and Pacific	7 95	.....	7 95
Total	1,506,486 40	1,678 60	1,508,165 00

The total earnings of these railroads on account of military transportation, from their first opening to 30th June, 1883, is stated as follows:

Names of companies.	Amount paid in cash under act of July 2, 1864.	Amount credited on bonds under act of July 2, 1864.	Amount withheld under act of March 3, 1873. (Rev. Stat. 5260.)	Amount withheld under act of May 7, 1878.	Total amount.
Union Pacific	$1,693,360 69	$1,693,360 87	$3,219,311 09	$1,257,448 83	$7,863,481 58
Central Pacific	261,106 21	261,106 29	691,132 83	1,583,189 62	2,796,534 95
Kansas Pacific	881,196 08	881,196 15	776,143 82	.....	2,538,536 05
Sioux City and Pacific	3,594 28	3,594 29	48,365 54	.....	55,554 11
Total	2,839,257 26	2,839,257 60	4,734,953 28	2,840,638 55	13,254,106 69

The following is a statement of the amount of accounts of the Pacific railroad companies acted upon in this office during the fiscal year ending June 30, 1883:

Names of companies.	Amount in Q. M. G. O. June 30, 1882.	Amount received during fiscal year.	Amount referred for settlement during fiscal year.	Amount in Q. M. G. O. June 30, 1883.
Union Pacific	$1,546,655 69	$527,338 91	$2,072,316 00	$1,678 60
Central Pacific	674,116 70	409,777 61	1,083,894 31	.....
Kansas Pacific	75,723 67	1,991 35	77,715 02	.....
Sioux City and Pacific	5,634 91	2,126 48	7,761 39	.....
Total	2,302,130 97	941,234 35	3,241,686 72	1,678 60

LAND-GRANT RAILROADS.

Payments for military transportation performed during the year over certain land-grant railroads were made through settlements of accounting officers of the Treasury, under the law of June 30, 1882, making appropriations for the support of the army during the fiscal year ending June 30, 1883, and for other purposes, which enacted as follows:

For the payment for army transportation lawfully due such land-grant railroads as have not received aid in Government bonds, to be adjusted by the proper accounting officers in accordance with the decisions of the Supreme Court in cases decided under such land-grant acts, but in no case shall more than fifty per centum of the full amount of the service be paid, one hundred and twenty-five thousand dollars: *Provided*, That such compensation shall be computed upon the basis of the tariff rates for like transportation performed for the public at large, and shall be accepted as in full for all demands for said services; *And provided further*, That any such land-grant roads as shall file with the Secretary of the Treasury their written acceptance of this

provision shall hereafter be paid for like services as herein provided; and all accounts of such railroads for services heretofore rendered shall be audited and paid as herein provided upon application of such roads and their acceptance of such sum in full of all claims for such services; and all laws inconsistent herewith are repealed.

Of the $125,000 appropriated by the foregoing law $76,108.38 remains in the Treasury at the close of the fiscal year unexpended; which, however, is not more than sufficient to settle accounts in course of adjustment or not yet presented.

WAGON AND STAGE TRANSPORTATION.

By wagon carriage the Department moved, by contract or hire and by army teams, 31,624 tons of military supplies, at a cost, as reported, of $773,920.

Forty-four contracts for wagon transportation have been made and received at this office during the fiscal year.

Three thousand five hundred and seventy-seven passengers and 13,079 pounds of stores have been transported by stage, costing $58,880.05.

WATER TRANSPORTATION.

There have been moved by water during the year 31,389 persons, 820 animals, and 10,959 tons of material at a cost of $349,220.14.

The service was performed by vessels belonging to established commercial lines, by contract, and by vessels owned and chartered by the United States.

The following named vessels, owned by the War Department, have been in the service of the Quartermaster's Department during the fiscal year, viz:

Steamer Chester A. Arthur, formerly the Henry Smith, in New York, Harbor; steamer Ordnance, in employ of the Ordnance Department, in New York Harbor; steam tug Atlantic, in New York Harbor; steam tug Resolute, in Boston Harbor; steam launch Thayer, at Fort Adams, R. I.; steam launch Monroe, at Fort Monroe, Va.; steam launch General Jesup, at Governor's Island, Forts Schuyler and Hamilton, New York Harbor; steam launch General Greene, at Fort McHenry, Baltimore, Md.; steam launch Hamilton, at David's Island, New York Harbor; steam launch Barrancas, at Fort Barrancas, Fla.; steamboat General Sherman, on Upper Missouri and Yellowstone Rivers, sold at public auction at Saint Louis, November 8, 1882, for $5,300; propeller General McPherson, in San Francisco Harbor, Cal.; steam launch Dispatch, formerly the Chelan, at Vancouver Depot, Wash.; steam launch Amelia Wheaton, at Fort Cœur d'Alene, Idaho; steam launch Lillie Lee, at Fort Totten, Devil's Lake, Dak.; schooner Matchless, at Key West, Fort Brooke, and Fort Barrancas, Fla., and sloop Belle of the Bay, at Saint Francis Barracks, Fla.

The cost of maintenance and of running these vessels during the year, as reported, was $131,112.68, and the total expenditure for water transportation during the year $349,220.14.

TRANSPORTATION ACCOUNTS AND CLAIMS.

Two thousand four hundred and twenty-five accounts and claims, amounting to $3,576,231.48, were adjusted during the year. Of these, 2,326, amounting to $3,173,977.92, were referred to the proper bureau or office for settlement; 43, amounting to $216,175.74, were unfavorably reported upon and rejection recommended; and 56, amounting to

$186,077.82, were suspended for additional evidence; 41, amounting to $6,111.86, were at the close of the year awaiting action.

The amount of appropriation for transportation of the Army was for the fiscal year ending 30th June, 1883, $4,164,000, of which amount about $900,000 was expended for payment of transportation employés, *i. e.*, agents, mechanics repairing wagons and harness, and teamsters. Full details of these expenditures on account of transportation will be found in the accompanying report of Lieut. Col. J. G. Chandler, deputy quartermaster-general, in charge of that branch of service in the office of the Quartermaster-General.

INDEBTED RAILROADS.

Special attention is invited to the remarks of the officer in charge of the collection of the debts of the southern railroad companies to the United States, for purchases of railway material in 1865–'66.

Of the fifty railroads which became indebted to the United States for such purchases, the accounts of forty-six have been closed and settled.

The four railroads which the books of this office show to be still indebted have made no cash payments for several years, and the peculiar circumstances of each case, as set forth in the report of the officer referred to, indicate that the present unsettled and unsatisfactory condition of affairs will continue indefinitely, unless Congress shall interpose either to relieve the debtors or authorize and direct some practicable method of procedure for collection of the balances due.

The papers relating to this southern railroad indebtedness are deposited in this office, an unsafe structure, not fire-proof.

The powers of this office do not include the means and appliances for the collection of disputed debts, and it has not the facilities for such an undertaking, which would seem more properly to pertain to the Treasury or law department of the Government.

It is therefore recommended that the necessary action be taken to have this office relieved of this entire business, and transferred to some more suitable department of the Government.

REGULAR AND MISCELLANEOUS SUPPLIES.

ANIMALS.

The cavalry and artillery horses purchased, so far as reported during the year, cost 151,113, at an average price per head of $156.59. Eight were purchased in the Department of the East; 5 in the Department of the South; 6 in the Department of Dakota; 313 in the Department of the Missouri; 150 in the Department of the Platte; 179 in the Department of California; 105 in the Department of Columbia; 38 at the New York depot; 3 at the Jeffersonville depot; 146 at the Saint Louis depot, and 12 at West Point.

For the Army trains there were purchased 195 mules, costing $33,155, at an average cost of $170.02, and 53 horses costing $11,680 at an average cost of $220.37.

The sale of 937 cavalry and artillery horses, 123 draught horses, and 553 mules realized $87,891.32, which is deposited in the Treasury to the credit of "miscellaneous receipts," except such small sum as was received from sales of horses to officers.

The following is a summary of the number of animals purchased, sold, died, &c., during the year, and remaining on hand June 30, 1883:

On hand, purchased, &c.	Horses.	Mules.	Oxen.
On hand July 1, 1882	8,068	8,464	25
Purchased	1,715	390	.....
Taken up, &c	117	62	.....
Total to be accounted for	9,900	8,916	25
Sold	1,060	533	.....
Died	323	361	.....
Lost and stolen	92	52	.....
Total sold, died, &c	1,475	966	.....
On hand June 30, 1883	8,425	7,950	25

FUEL, FORAGE, AND STRAW.

The issues of fuel were 112,596 cords of wood and 49,818 tons of coal. Of forage 842,298 bushels of oats, 420,706 bushels of corn, 154,367 bushels of barley, 119,635 bushels of bran, 47,028 tons of hay, 2,945 tons of straw, and 83 tons of fodder.

Inconvenience and sometimes hardship results from the operation of the law of June 8, 1878, to officers of the Army serving west of the Mississippi River, which compels the officer to purchase fuel for his own use, and I therefore recommend that this subject be brought to the attention of Congress, and that the allowance, when on hand at posts, be supplied as was done before the passage of the act referred to.

CONTRACTS.

During the year 1,028 contracts were received, examined, and filed in this office. Eight hundred and two were for 126,712 cords of wood, 129,485,178 pounds of coal, 75,970 bushels of charcoal, 26,175,577 pounds of corn, 23,023,820 pounds of oats, 8,710,700 pounds of barley, 3,388,904 pounds of bran, 116,334,666 pounds of hay, 8,254,932 pounds of straw; 14 were for indefinite quantities of fuel and forage; 4 for work on National Cemeteries; 67 for clothing and equipage; 6 for horses and mules; 4 for harness materials; 48 for transportation; 5 for buildings; 1 for ambulance wagons and 4 for wagon materials; 1 for carts and open links; 2 for building materials; 7 for mineral oil; 11 for services; 3 for leather; 2 for broom corn; 3 for stationery; 1 for packing boxes; 1 for construction of cisterns; 3 for construction of roadways, and 39 leases.

WAGONS, AMBULANCES, AND HARNESS.

A sufficient number of 6-mule, 2-horse, and 4-mule army wagons being on hand to meet requirements, none were purchased.

Twenty-five ambulance wagons were purchased under contract at $206 each.

Sixteen spring wagons, Dougherty pattern, were furnished to posts during the year from stock on hand, and 8 spring wagons of other patterns were purchased and supplied under authority of the Secretary of War.

By direction of the War Department 136 sets of 6-mule army-wagon harness complete, at a cost of $10,483.49, and 127 sets of 4-mule ambulance harness complete, costing $6,944.88, were manufactured at the military prison at Fort Leavenworth.

STOVES AND RANGES.

There were delivered to the Quartermaster's Department by the Ordnance Department 646 cast-iron heating stoves of adopted pattern, together with various extra parts (grates, &c., required for repairs), costing $9,076.69.

Sixty army parlor heaters and 36 army cooking ranges, No. 2, and 20 army cooking ranges, No. 1, were purchased, costing $5,985.

LIGHTS.

Eight hundred and six bracket lamps, single burners, 420 pendent lamps, double burners, Army pattern; 1,253 lanterns, oil or oil and candles combined, and the necessary chimneys and wicks, and the various extra parts required for expenditure and repairs have been supplied from stock on hand.

Two hundred and seventy-six thousand gallons of mineral oil were purchased.

The aggregate expenditure on account of illuminating supplies was $53,500. The money received from sales to officers on account of these supplies reverts to the appropriation.

MISCELLANEOUS CLAIMS AND ACCOUNTS.

At the beginning of the year there were on file 12,762 miscellaneous claims and accounts, amounting to $6,996,977.87, and 220 accounts for $75,352.12, and 1,468 claims and accounts, since received, $348,860.27. Total, 14,450, amounting to $7,421,190.26.

Sixty-four claims were approved for $4,301.51; 42 claims were referred to other departments, by report or otherwise, amounting to $118,069.64; 324 claims were referred to the Third Auditor of the Treasury for action of the accounting officer, in amount $51,064.58; reduction on claims approved and referred $10.548.87; 202 claims, amounting to $57,535.77, were rejected; 481 accounts, amounting to $37,713.07, were approved, being a reduction in the amount as presented of $1,188.41; 183 accounts were referred to other departments, to which they pertained, amounting to $55,413.25; 8 accounts were rejected, amounting to $690. Total upon which action has been taken during the fiscal year, 1,304 claims and accounts, amounting to $336,525.10; 12,899 miscellaneous claims and 247 accounts remain on file, amounting to $7,084,665.16.

It will be seen by the foregoing statement that a considerable increase is shown in the number of claims and accounts received during the past year over the previous year, which statement also shows, by comparison, a slight increase in the number of claims and accounts on hand at close of the year, though the total number of such claims and accounts acted upon and disposed of during the year has been greater.

CLAIMS FOR QUARTERMASTER'S STORES PRESENTED UNDER ACT OF JULY 4, 1864.

The act of March 3, 1879, barred all this class of claims not presented and filed prior to January 1, 1880.

There were investigated and reported upon by agents 2,586 claims, amounting to $1,770,118.

The whole matter of investigation of this class of claims has been centralized in the Quartermaster-General's Office.

Congress, by act of August 5, 1882, made appropriation for the pay-

ment of salaries and expenses of agents and pay of clerks, and thus relieved the Army appropriation to that extent.

As the years increase since these claims originated, more difficulty is experienced in their investigation; but the work progresses steadily.

There were on hand July 1, 1882, and received during the year, 16,896 claims, amounting to $7,771,174.58.

Military boards and commissions of claims called up 71, for $44,388.91. Upon the above, action was taken as follows: Approved in whole or in part, 1,879. Upon these there was allowed $312,151.70, and disallowed $573,383.13.

One thousand three hundred and fourteen claims were rejected, amounting to $2,606,673.38.

The total on which action was taken was 4,993 claims, amounting to $3,492,208.21.

There remained on hand July 1, 1883, 11,974 claims, amounting to $4,323,355.28.

In addition to the above, there were received 138 claims of a miscellaneous character, amounting to $19,259.64, and 216 of that character, amounting to $39,769.28, received action, and were reported to the accounting officers of the Treasury.

In compliance with the act of August 7, 1882, special action was taken in the claim of Julia A. Nutt, widow and executrix of Haller Nutt, deceased, and it was transmitted to Congress through the honorable Secretary of War, December 22, 1882. The amount as stated was $1,065,264.74.

The following is a statement of claims presented, allowed, disallowed, &c., since July 4, 1864:

Number of claims presented from July 4, 1864, to June 30, 1883		53,744
Number approved from July 4, 1864, to June 30, 1883	14,916	
Number disallowed from July 4, 1864, to June 30, 1883	26,854	
Total acted upon		41,770
Number on hand July 1, 1883		11,974
Amount of 53,744 claims presented		$38,308,661 59
Amount of 41,770 claims acted upon		33,985,306 31
Remaining claims (11,974)		4,323,355 28

CLOTHING AND EQUIPAGE.

There were appropriated for the fiscal year ending June 30, 1883, for clothing and equipage $1,400,000.

The deposits to the credit of the appropriation derived from sales to officers and on account of clothing not drawn by enlisted men amounted to $69,261.96, making an available sum of $1,469,261.96.

Remittances to officers on this account were $1,434,383.98, leaving in the Treasury an undrawn balance of $34,877.98, which will be needed to pay for articles ordered or already contracted for.

Great care has been taken to avoid accumulation of clothing at posts, and still very little progress has been made towards securing a working stock of such articles as may be needed to meet sudden emergencies, and no less sum than $1,400,000 will keep the Army well clothed and provided with equipage during the next fiscal year.

Requisitions have been filled as promptly as circumstances would permit, and no case of actual suffering for want of clothing has been brought to the attention of this office.

Buffalo overcoats, fur caps, and fur gauntlets to the amount of $95,000 have been purchased, and under existing regulations were used by the troops at the cost of the Government, remaining the property of the Department, but the system does not work well, and hereafter caps and gauntlets will be issued to the soldier at cost price, and the overcoats will be issued only to the troops on guard duty and in such expeditions as may involve loss of life or limb from exposure in rigid northern latitudes.

The scarcity of pelts from which these coats are made is increasing and some other material will have to be substituted.

For many years past this Department has been endeavoring to devise a shoe and boot suitable for Army use, and now has, it is believed, found, after a careful study of the subject, an article which will add much to the comfort of the wearer, will present a good appearance, and at the same time be serviceable.

The Secretary of War has authorized, for trial, the manufacture of 500 pairs at the Military Prison.

Authority has been obtained to sell all the surplus old war stock on hand at depots, not required for issue during the next five years, after advertisement, and instructions to dispose of it have been given.

The helmets supplied are generally satisfactory and a great improvement on the former head covering of the enlisted men.

The 1,000 drab-colored hats purchased last year and sent to Arizona, New Mexico, and Texas have met with great favor, and it is determined to order an additional thousand.

Dark-blue indigo cloth of finer quality has been adopted, and purchases are being made, and hereafter the uniform coat will be manufactured from it.

A drum of new pattern has been adopted and will hereafter be issued, the old war stock having become depleted.

Specifications for clothing and equipage have been either amended or adopted for scrubbing-brushes, trousers, barrack chairs, helmets, drum slings, drums, cotton stockings, blouse-lining flannel, dark blue shirting and cape-lining flannel, dark-blue indigo coat cloth, dark blue overshirts, blouses, and drawers; and standards were distributed to the general depots of scrubbing brushes, trousers, barrack chairs, helmets, drums, muskrat caps and gauntlets, cotton stockings, gray blouse-lining flannel, dark blue overshirts, dark blue coat cloth and drawers.

Of the property issued last year to the relief of sufferers by the overflow of the Mississippi, as shown in that report, to the value of $9,630.41, articles to the value of $4,359.89 have not been returned. Efforts to secure their return have failed. This is the case generally when property of the Government is diverted from its appropriate use.

Under the act of March 3, 1881, 3 campaign hats, 1,003 forage caps, 5,525 great-coats, 90 uniform coats, 683 uniform jackets, 4,624 blouses and sack coats, 1,752 trousers, 63 pairs boots, 725 pairs shoes, and 167 drawers—old pattern—were turned over to the National Home for Disabled Volunteers.

Boots, shoes, chairs, and corn-brooms required for the Army have all been manufactured at the Military Prison, as required, to the amount of $170,133.72.

Clothing and equipage to the value of $2,000.96 were furnished the detachment commanded by Lieutenant Garlington, of the Lady Franklin Bay Expedition.

The illustrations of the uniform of the Army have been published and distributed to the commanding generals of divisions and depart-

ments, and commanding officers of regiments and companies, as well as to officers of the Quartermaster's Department.

The hospital tents are worn out and exhausted.

Full and complete information, with statements, will be found in the report of Capt. J. F. Rodgers, U. S. A., in charge of the clothing supply branch of this office herewith.

NATIONAL CEMETERIES.

Since the last annual report of this office the soldiers' lot in the Woodland Cemetery at Quincy, Ill., has been added to the list of National Military Cemeteries, making the whole number of these cemeteries under the care and control of the Quartermaster's Department eighty-three, in which there are now 321,369 interments.

During the year seven superintendents were appointed, one died, one resigned, one was discharged, and one appointment was cancelled, leaving seventy in service at the close of the year.

Though the contracts for furnishing head-stones for soldiers' graves in private, village, and city cemeteries were closed last year, the stones ordered under them have not yet all been delivered and erected. Much delay has been experienced in the prosecution of this work and many difficulties encountered in bringing the business to a satisfactory close. The Department has, therefore, made arrangements for the furnishing at the quarries, to be shipped to the applicants direct, such additional stones as may be required for graves in these cemeteries. Applications continue to be received, and are to be filled by supplying the stones in the manner indicated.

A considerable number of the old head-boards which have marked the graves of prisoners of war and civilians in the Arlington and Soldiers' Home National Cemeteries have been replaced with small marble slabs. More will be furnished, as funds can be spared for the purpose, until all the graves in the National Cemeteries have been supplied with permanent head-stones.

Satisfactory progress has been made in the work of constructing the roadways to the Chattanooga, Mound City, and New Albany National Cemeteries, under the special appropriations therefor, and the work will be finished before winter.

Outbuildings at the Vicksburg Cemetery, and rostrums at Fort Leavenworth, Fort Scott, Marietta, Mound City, and Stone River Cemeteries have been constructed, and the arched gateway at the Marietta Cemetery has been completed.

New water supply has been introduced at the Nashville Cemetery.

The purchase of additional land for the Loudon Park National Cemetery, near Baltimore, Md., has been completed, and proposals have been invited for the work of improvements rendered necessary by the extension of the grounds.

The necessity for the extension of the grounds of the Cypress Hills National Cemetery has been heretofore fully set forth in the annual reports of this office, and a bill having this object in view has been reported upon favorably by the Military Committee of the House of Representatives at the first session of the Forty-seventh Congress.

This report, however, as also the former action of the Department in the matter, recommended the purchase of two and two-thirds acres of land from the Cypress Hills Cemetery Company, at a cost of some $35,000. But it is ascertained that suitable ground for the purpose required, conveniently near this cemetery, can be procured at about $1,200

per acre for a tract of about 13 acres, taken as a whole. By this course five times as much area will be secured at less than half the cost of the purchase previously contemplated.

Considerations of economy, no less than the pressing needs for the extension of these grounds, impel me to urge that the special attention of Congress be invited to this subject.

The ground belonging to the Soldiers' Home, lying north of theHarewood road, including the present site of the Soldiers' Home National Cemetery, has recently been transferred to the War Department for the use of the Soldiers' Home National Cemetery, and an appropriation of $15,000 by Congress is asked in payment therefor.

The site of the National Cemetery, though under control of the Quartermaster's Department since 1862, and now almost wholly occupied by military interments, in reality belongs to the Soldiers' Home, as no compensation has been made for it to that institution.

The extension of this cemetery, by the addition of these grounds, affords a much needed improvement, and enables the Department to provide for future interments and furnish necessary accommodations for occasions of public ceremonies.

For the perpetual occupancy and use of this ground by the United States, it seems but just and reasonable that the Home should be compensated.

It has been suggested by the officer in charge of National Cemeteries, in his report to this office, herewith submitted, that the projected new park on the river flats be connected with the Arlington Grounds by means of a bridge. This suggestion meets my hearty approval, and I desire to invite the special attention of the Secretary of War to the subject.

The recent purchase of the Arlington estate, under special authority of Congress, and the perfection of the title thereto, have placed the ownership of these grounds beyond controversy.

The tract covers an area of some 1,100 acres. Of this the National Cemetery occupies about one-fifth and the post of Fort Myer about one-sixth. The grounds of the cemetery, tastefully laid out and appropriately ornamented, have been provided with substantial and permanent improvements—roads, drives, and entrances—and with the care and attention devoted to its maintenance always presents a handsome and attractive appearance. This cemetery in reality is not only a place of sepulture, but an extensive park of rare beauty, complete within itself, and it seems but fitting that it should form a part of the comprehensive system of improvements and beautifying of the water front of the city contemplated and inaugurated by special direction of Congress.

The present means of approach to this cemetery from this city is by the Aqueduct Bridge, thence by a rough road uninviting to visitors and at times almost impassable. The improvement of this road has been repeatedly recommended, and the estimates for the current year included an item for these repairs, but no appropriation was made.

In view of the recommendation that a new means of approach be provided by the construction of a bridge to connect the new river park with the grounds of this cemetery, the request for an appropriation for the repair of this road is not renewed.

S. B. HOLABIRD,
Quartermaster-General, United States Army.

Hon. ROBERT T. LINCOLN,
Secretary of War.

List of papers accompanying the annual report of the Quartermaster-General for the fiscal year ending June 30, 1883.

1. Report of the inspection branch of the Quartermaster-General's office during the year ending June 30, 1883.

2. Report of Col. Alex. J. Perry, assistant quartermaster-general, United States Army, of the operations of the accounts branch of the Quartermaster-General's Office during the year ending June 30, 1883.

3. Report of Capt. J. F. Rodgers, military storekeeper, United States Army, of the operations of the clothing supply branch of the Quartermaster-General's Office during the year ending June 30, 1883.

A.—Statement showing articles of clothing and equipage on hand at the issuing depots June 30, 1882, the quantities purchased, manufactured, received from posts and depots, taken up, sold, transferred, expended, issued to the Army, and the quantities remaining in depot June 30, 1883.

B.—Statement of amounts received and expended by the Quartermaster's Department on account of clothing and equipage during the year.

C.—Statement showing remittances on account of clothing and equipage during the year.

D.—Specifications for clothing, equipage, and materials for the manufacture of clothing and equipage, adopted or amended and distributed to the officers of the Quartermaster's Department during the fiscal year ending June 30, 1883.

E.—Statement showing articles of old-pattern clothing turned over to the National Home for Disabled Volunteers during the year.

F.—Statement showing articles of clothing and equipage issued to the Lady Franklin Bay Expedition during the year ending June 30, 1883, and money value of the property.

G.—Statement showing articles of clothing and equipage issued to the military prison at Fort Leavenworth, Kans., during the year, and money value thereof.

H.—Statement showing articles of quartermaster's stores issued to the military prison at Fort Leavenworth, Kans., during the year, and money value of the property.

I.—Statement showing value of labor performed for the Quartermaster's Department by the military prison at Fort Leavenworth, Kans., during the year.

K.—Statement showing articles of clothing and equipage manufactured at the military prison at Fort Leavenworth, Kans., for the Quartermaster's Department, during the year ending June 30, 1883; also, cost of materials, labor, &c.

L.—Copy of report of Capt. J. F. Rodgers, military storekeeper, United States Army, of April 9, 1883, relating to improvements in boots and shoes for the Army, with copy of action of the Secretary of War thereon, and copies of drawings of paterns of shoes recommended for trial.

M.—Copy of book on the military shoes translated and printed by direction of the Quartermaster-General from the original of Maj. S. A. Salquin, Army Swiss Confederation.

4. Report of Lieut. Col. J. G. Chandler, deputy quartermaster-general, Unite States Army, of the operations of the Quartermaster-General's Office pertaining to transportation and indebted railroads, regular and miscellaneous supplies, and miscellaneous claims and accounts during the fiscal year ending June 30, 1883.

A.—Statement of all troops and property transported under direction of the Quartermaster's Department during the year.

B.—Statement showing principal movements of troops during the year, and average length of march or movement in each case.

C.—Abstract of contracts for wagon transportation entered into by the Quartermaster's Department during the year.

D.—Abstract of contracts for water transportation for the year ending June 30, 1883.

E.—Statement of vessels owned and purchased by the Quartermaster's Department during the fiscal year ending June 30, 1883.

F.—Statement of vessels chartered, impressed, or employed by the Quartermaster's Department during the year ending June 30, 1883.

G.—Circular embodying rules and regulations regarding certain transportation and the settlement of accounts arising therefrom.

H.—Statement showing cost of transportation of the Army and the number of persons and pounds of freight transported during the fiscal year.

I.—Copy of letter of the Solicitor of the Treasury in relation to suit brought against certain indebted railroad companies.

5. Report of Col. Alex. J. Perry, assistant quartermaster-general, United States Army, of the operations of the barracks and quarters branch, Quartermaster-General's Office, during the fiscal year ending June 30, 1883.

6. Report of Maj. Benj. C. Card, quartermaster, United States Army, of the opera-

tions of the claims branch of the Quartermaster-General's Office for the fiscal year ending June 30, 1883.

7. Report of Lieut. Col. R. N. Batchelder, deputy quartermaster-general, United States Army, of the affairs relating to the care and maintenance of national military cemeteries for the fiscal year ending June 30, 1883.

A.—Statement of disbursements of appropriations for national cemeteries during the fiscal year ending June 30, 1883.

B.—Copy of deed, dated March 31, 1883, executed by George W. C. Lee, conveying to the United States the title of property known as the Arlington estate.

C.—Copy of the opinion of Attorney-General in relation to the validity and completeness of title deed to Arlington estate.

REPORT OF THE COMMISSARY-GENERAL OF SUBSISTENCE.

WAR DEPARTMENT,
OFFICE COMMISSARY-GENERAL OF SUBSISTENCE,
Washington, D. C., Oct. 8, 1883.

SIR: In compliance with your directions of 21st ultimo, I have the honor to submit the following report of the operations of the Subsistence Department for the fiscal year ending June 30, 1883:

RESOURCES AND EXPENDITURES.

The following statement exhibits the aggregate fiscal resources and expenditures of the department for the year mentioned, and the balances at the close of the fiscal year:

RESOURCES.

Amounts in the Treasury to the credit of appropriations of the Subsistence Department on June 30, 1882, as follows:		
Subsistence of the Army, 1881	$9,364 16	
Subsistence of the Army, 1882	1,428 62	
Relief of persons rendered destitute by overflow of Mississippi River	41 12	
		$10,833 90
Amounts to the credit of officers of the Subsistence Department, and of officers doing duty in the Subsistence Department, with the Treasurer, assistant treasurers, and designated depositaries, and in their personal possession, on June 30, 1882, as follows:		
Subsistence of the Army, 1881	$423 02	
Subsistence of the Army, 1882	399,931 88	
		400,354 90
Amounts refunded to the Treasury near close of fiscal year 1882, but not carried to the credit of the appropriations by June 30, 1882, since covered in as follows:		
Subsistence of the Army, 1880 and prior years	$9 48	
Subsistence of the Army, 1881	50	
Subsistence of the Army, 1882	983 64	
		993 62
Amounts appropriated for the Subsistence Department for the fiscal year ending June 30, 1883, as follows:		
Subsistence of the Army, 1883, act of June 30, 1882	$2,300,000 00	
Subsistence of the Army, 1879 and prior years, act of August 5, 1882	2,007 12	
Subsistence of the Army, 1880 and prior years, act March 3, 1883	1,105 95	
Twenty per cent. additional compensation prior to July 1, 1879, act August 5, 1882	98 00	

Amounts appropriated for the Subsistence Department, &c.—Continued.

Twenty per cent. additional compensation prior to July 1, 1880, act March 3, 1883	$846 53	
Commutation of rations to prisoners of war in rebel States prior to July 1, 1879, act August 5, 1882, and warrant of the Secretary of the Treasury	19,177 25	
Commutation of rations to prisoners of war in rebel States prior to July 1, 1880, act March 3, 1883	13,776 25	
Claims for quartermaster's stores and commissary supplies, act July 4, 1864, per act March 1, 1883, being portion for commissary supplies	4,922 90	
		$2,341,934 00

Amounts collected from various sources during the fiscal year 1883, in process of cover into the appropriations of the Subsistence Department on June 30, 1883, as follows:

Subsistence of the Army, 1881	$61 32	
Subsistence of the Army, 1882	11 13	
Subsistence of the Army, 1883	43 40	
		118 85

Amounts collected from various sources and refunded to the appropriations of the Subsistence Department on the books of the Treasury during the fiscal year 1883, as follows:

Subsistence of the Army, 1880 and prior years	$1,170 02	
Subsistence of the Army, 1881	605 78	
Subsistence of the Army, 1882	24,200 33	
Subsistence of the Army, 1883	55,916 93	
Commutation of rations to prisoners of war in rebel States (indefinite)	396 25	
Relief of persons rendered destitute by overflow of Mississippi River	691 20	
		82,980 51

Amount refunded on the books of the Treasury under act of March 3, 1875 (18 Stat. Large, 418), as follows:

Subsistence of the Army, 1880, transfer account	$448 12	
Subsistence of the Army, 1881, transfer account	60,779 52	
		61,227 64

Amounts received from sales of public property to be deposited as "miscellaneous receipts" 41 27

Amount received by officers of the Subsistence Department, and by officers doing duty in the Subsistence Department, from sales of subsistence stores to the following purchasers, during the fiscal year 1883, and taken up for immediate disbursement under the appropriation Subsistence of the Army, 1883:

Sales to officers of the Army, $460,523.51; to enlisted men, $307,741.01; to companies, detachments, and hospitals, $186,622.46; to civil employés, $24,985.91; to Fort Leavenworth Military Prison, $24,877.59; to surveyors, $3,837.66; to railroad engineers, $478,62; to civil employés of Smithsonian Institution, $42.76; to geographical and geological surveyors, $1,592.17; to Princeton College exploring expedition, $141.18; to soldiers' reunion, $5; to headquarters of the Army, $20.59; to Indian agents, $253.79; to Quartermaster's Department, $873.22; of condemned stores at auction, $6,669.02; of boxes, barrels, &c., $625.15; of garden seeds and agricultural implements, $496.94; total 1,019,786 58

Amounts taken up by officers doing duty in the Subsistence Department, on account of reclamations for stores lost, damaged, &c., and in correction of errors in their accounts, &c., during the fiscal year 1883:

Subsistence of the Army, 1883 1,388 61

Amount collected from representatives of deceased officers:

Subsistence of the Army, 1882 718 62

Amounts in hands of representatives of deceased officers to be collected:

Subsistence of the Army, 1878	$109 84	
Subsistence of the Army, 1882	248 63	
		358 47

Amounts charged against deceased, resigned, and dismissed officers, on account of funds alleged to have been lost by theft, &c., as follows:

Subsistence of the Army, 1879 and prior years 3,000 89

Amounts charged against officers still in service on account of funds alleged to have been lost by theft, &c., and for which relief can only be obtained in the Court of Claims under sections 1059 and 1062, Revised Statutes, as follows:		
Subsistence of the Army, 1879 and prior years	$2,772 86	
Subsistence of the Army, 1880	393 96	
Subsistence of the Army, 1881	265 47	
Subsistence of the Army, 1882	39 18	
		$3,471 47
Total resources		3,927,209 33

EXPENDITURES.

Amounts expended on the books of the Treasury from the appropriations of the Subsistence Department during the fiscal year 1883, as follows:		
Subsistence of the Army, 1879 and prior years, act August 5, 1882	$2,007 12	
Subsistence of the Army, 1880, act March 3, 1883	1,105 95	
Subsistence of the Army, 1881	51 84	
Subsistence of the Army, 1882	713 91	
Subsistence of the Army, 1883, transferred to appropriation "salaries of civil employés in lieu of general service, or detailed enlisted men, 1883"	76,562 88	
Commutation of rations to prisoners of war in rebel States prior to July 1, 1879, act August 5, 1882	19,175 50	
Commutation of rations to prisoners of war in rebel States prior to July 1, 1880, act March 3, 1883	13,776 25	
Claims for quartermaster's stores and commissary supplies, act July 4, 1864, per act March 1, 1883, being portion for commissary supplies	4,890 90	
Twenty per cent. additional compensation prior to July 1, 1879, act August 5, 1882	98 00	
Twenty per cent. additional compensation prior to July 1, 1880, act March 3, 1883	846 53	
		119,228 88
Amounts disbursed by officers of the Subsistence Department, and officers doing duty in the Subsistence Department, during the fiscal year 1883, as follows:		
Subsistence of the Army, 1881	$417 19	
Subsistence of the Army, 1882	399,931 88	
Subsistence of the Army, 1883	2,626,320 89	
		3,026,669 96
Amounts dropped by officers doing duty in the Subsistence Department in correction of errors in their accounts during the fiscal year 1883:		
Subsistence of the Army, 1883		219 78
Amount allowed by Court of Claims in case of alleged loss of funds by theft (18 C. Cls. Reports, p. 1):		
Subsistence of the Army, 1879 and prior years		1,823 15
Amount transferred on books of Treasury, act March 3, 1875 (18 Stat. Large, 418):		
Subsistence of the Army, 1880 and prior years, transfer account		448 12
Amount deposited to the credit of the Treasurer of the United States and covered into the Treasury as "miscellaneous receipts on account of sale of public property"		41 27
Amounts carried to the surplus fund on June 30, 1883:		
Subsistence of the Army, 1881 and prior years, transfer account, act March 3, 1875 (18 Stat. Large, 418)	$60,779 52	
Subsistence of the Army, 1880 and prior years	1,179 50	
Subsistence of the Army, 1881	9,918 60	
		71,877 62
Total expenditures		3,220,308 78

BALANCES.

Amounts in the Treasury to the credit of appropriations of the Subsistence Department on June 30, 1883, as follows:

Subsistence of the Army, 1882	$26,617 30	
Subsistence of the Army, 1883	75,925 88	
Relief of persons rendered destitute by overflow of Mississippi River	732 32	
Claims for quartermaster's stores and commissary supplies, act July 4, 1864, per act March 1, 1883, being portion for commissary supplies	32 00	
Commutation of rations to prisoners of war in rebel States prior to July 1, 1879, act August 5, 1882	1 75	
Commutation of rations to prisoners of war in rebel States (indefinite)	396 25	
		$103,705 50

Amounts to the credit of officers of the Subsistence Department, and of officers doing duty in the Subsistence Department, with the Treasurer, assistant treasurers, and designated depositaries, and in their personal possession on June 30, 1883, as follows:

Subsistence of the Army, 1881	$5 83	
Subsistence of the Army, 1883	579,547 59	
		579,553 42

Amounts remitted by the Treasury near close of fiscal year 1883, but not taken up by officers by June 30, 1883:

Subsistence of the Army, 1883		10,000 00

Amounts refunded to the Treasury near close of fiscal year 1883, but not carried to the credit of the appropriations by June 30, 1883:

Subsistence of the Army, 1881	$64 32	
Subsistence of the Army, 1882	11 13	
Subsistence of the Army, 1883	7,202 51	
		7,277 96

Amounts in hands of representatives of deceased officers to be collected:

Subsistence of the Army, 1878	$109 84	
Subsistence of the Army, 1882	248 63	
Subsistence of the Army, 1883	1,246 83	
		1,605 30

Amounts charged against officers (deceased and resigned) on account of funds alleged to have been lost by theft, &c., as follows:

Subsistence of the Army, 1879 and prior years		3,000 89

Amounts charged against officers still in service on account of funds alleged to have been lost by theft, &c., and for which relief can only be obtained in the Court of Claims under sections 1059 and 1062, Revised Statutes, as follows:

Subsistence of the Army, 1879 and prior years	$949 71	
Subsistence of the Army, 1880	393 96	
Subsistence of the Army, 1881	265 47	
Subsistence of the Army, 1882	39 18	
Subsistence of the Army, 1883	109 16	
		1,757 48
Total balances		706,900 55

SUPPLIES.

The Subsistence Department is charged with the duty of purchasing and issuing to the Army such supplies as enter into the composition of the ration, and of procuring and keeping for sale to officers and enlisted men such articles as may from time to time be designated by the inspectors-general of the Army.

The articles composing the ration issued to the enlisted men of the Army are as follows:

Pork.	Peas.	Vinegar.
Bacon.	Rice.	Candles.
Beef.	Hominy.	Soap.
Flour and bread.	Coffee.	Salt.
Cornmeal.	Tea.	Pepper.
Beans.	Sugar.	Yeast powder.

The articles designated by the inspectors-general to be kept for sale to officers and enlisted men are as follows:

Allspice, ground.	Gelatine.	Pine apples, canned.
Apples, canned.	Ginger, ground.	Pins.
Apples, dried or evaporated.	Ham (deviled), canned.	Pipes, briarwood.
Asparagus, canned.	Hams, sugar cured.	Pipestems.
Bacon, breakfast.	Hops.	Potatoes.
Blacking, shoe.	Jam (blackberry), canned.	Preserves (damsons), canned.
Blueing.	Jelly (currant), canned.	Prunes.
Brushes, blacking.	Lard, in tins.	Raisins.
Brushes, clothes.	Lobsters, canned.	Salmon, canned.
Brushes, hair.	Macaroni.	Salt, table.
Brooms, whisk.	Mackerel (fresh), canned.	Sardines.
Butter.	Matches, safety.	Sauce (cranberry), canned.
Can-openers.	Milk, canned.	Sauce, Worcestershire.
Cheese.	Mushrooms, canned.	Shrimp, canned.
Chile-con-carne	Mustard.	Soaps, toilet.
Chocolate.	Nutmegs.	Soups (assorted), canned.
Cigars.	Needles.	Starch, corn.
Cinnamon, ground.	Needle-books.	Starch, laundry.
Clams, canned.	Oatmeal.	Sugar, cut loaf.
Cloves, ground.	Oil, olive.	Sugar, granulated.
Coffee, choice.	Onions.	Sirup.
Combs.	Oysters, canned.	Tapioca.
Corn (green), canned.	Peaches, canned.	Thread.
Crabs, canned.	Peaches, dried or evap'd.	Tobacco.
Crackers, assorted.	Pears, canned.	Tomatoes, canned.
Flavoring extract, lemon.	Peas, green.	Tongue, canned.
Flavoring extract, vanilla.	Pepper, red.	Towels.
Flour, family.	Pickles, in jars.	Wheat, cracked.

Prior to July 1, 1879, subsistence stores were sold to officers and enlisted men at cost price, but in the act making appropriation for the support of the Army for the fiscal year commencing July 1, 1879, it was provided that "to the cost of all stores and other articles [subsistence] sold to officers and enlisted men, except tobacco [to the latter], as provided for in section 1149 of the Revised Statutes, 10 per centum shall be added to cover wastage, transportation, and other incidental charges." The same proviso, substantially, was enacted in each subsequent appropriation act for the support of the Army, until that for the fiscal year ending June 30, 1884, from which it was omitted. In consequence of this omission it was a question whether the stores should not, after June 30, 1883, be sold at cost price, under the general law (section 1144 Revised Statutes) as it existed prior to the special proviso referred to; but, upon submitting the question to the Secretary of War, it was decided by him that the legislation referred to was continuous. The additional 10 per centum, therefore, is still charged on all sales to officers and enlisted men, except on sales of tobacco to enlisted men, and on sales to companies, detachments, and hospitals, these sales being by law required to be made at cost price.

SOURCES OF SUPPLY OF SUBSISTENCE STORES.

Subsistence supplies for the Army are purchased as near the points of consumption as practicable, regard being had to their quality and

prices as compared with those of stores at more remote points, and to the cost of transportation from place of purchase to place of issue or sale. The greater portions of the supplies have, during the past year, been procured, as usual, in the large markets of the country, such as New York, Chicago, San Francisco, Saint Louis, New Orleans, &c., but fresh meat, and, to a great extent, flour and fresh vegetables, have been obtained from dealers and producers at or near the points of issue.

In consequence of the completion of another transcontinental railroad and the extension of other railroad lines into the Territories, direct rail communication is now had with a large number of Army posts, by which the department is enabled to supply these posts with fresh stores more frequently than formerly, and with much less cost to the Government and with much less loss from deterioration than heretofore. The rapid development of the country along the lines of these railroads will also enable the department to procure a considerable portion of the more bulky, heavy, and important articles of the ration in the vicinity of the posts.

ADVERTISEMENTS AND CONTRACTS.

During the fiscal year ended June 30, 1883, 118 newspaper advertisements and 87 circulars and posters inviting proposals for subsistence stores were reported to this office. There were also reported 2,217 contracts of various kinds for fresh meats, complete rations, and other supplies required for the subsistence of the Army.

Statement of the average contract prices per pound (independent of quantities purchased) in each State and Territory for fresh beef for supply of the Army in the fiscal years 1883 *and* 1884.

State or Territory.	Average price per pound.		State or Territory.	Average price per pound.	
	1883.	1884.		1883.	1884.
	Cents.	*Cents.*		*Cents.*	*Cents.*
Maine	11.75	10.25	Missouri	7.83	7.49
Massachusetts	14.21	10.73	Minnesota	9.35	8.95
Rhode Island	10.00	9.62	Nebraska	8.45	8.35
Connecticut	15.00	9.23	Kansas	7.15	7.76
New York	12.08	10.31	Indian Territory	6.16	8.93
Pennsylvania	13.94	13.87	Wyoming	9.10	9.37
Maryland	11.93	10.99	Dakota	10.30	10.18
District of Columbia	9.50	7.94	New Mexico	8.96	11.27
Virginia	9.12	7.61	Colorado	8.77	11.18
Georgia	12.00	10.00	Utah	8.62	9.37
Florida	8.62	11.50	Montana	9.18	10.94
Alabama	12.50	12.00	California	9.90	9.80
Louisiana	12.00	9.90	Arizona	12.84	10.76
Arkansas	6.97	9.00	Washington	5.58	9.36
Texas	5.48	8.00	Idaho	7.05	9.83
Kentucky	6.50	12.00	Nevada	12.00	13.25
Ohio	6.15	8.60	Oregon	8.96	10.75
Indiana	8.00	9.46			
Illinois	8.00	10.00	Average for each year	10.11	10.01
Michigan	11.42	11.17			

This statement reveals an unexpected fact, in this, that although there has been generally a decline in the price of beef in the States and Territories that are consumers rather than raisers of cattle, there has been generally a rise in price in those which furnish the cattle for consumption in the others. Thus, while the price has declined on the Atlantic Coast, it has increased in the States along the Ohio River, and generally on the great plains and in the extreme Northwest.

OBSERVATIONS AND EXPLORATIONS IN THE ARCTIC SEAS.

Fall and winter of 1882.

It was learned in November last that, on account of the failure of the relief expedition to Lady Franklin Bay to reach its destination, the subsistence supplies transferred to an officer of the Signal Corps in June, 1882, for the use of the Lady Franklin Bay party, had been returned to St. John's, Newfoundland, and that it was the intention of the Chief Signal Officer to keep them at that place and send them out with another expedition to be dispatched during the present year. Knowing how rapidly subsistence stores deteriorate, and how likely it was that some of those returned were in a damaged condition from the sea voyage they had undergone, the Commissary-General advised the Secretary of War that these stores should not be kept on hand another year and again sent out to a station so remote and so difficult to reach. As it is deemed best in all cases to furnish to the Army stores of the latest crop and as fresh as practicable, the Commissary-General of Subsistence considered that if stores were wanted another year for the party in the Arctic Seas fresh ones, and not those old ones, should be sent. He therefore recommended that they be returned to the United States for immediate use by the Army, or to be otherwise disposed of as might appear best after their arrival. This was approved by the Secretary of War, and nearly all of the stores were returned to the United States in January last. Such of them as were suitable were issued to the Army, and the damaged ones after due examination by a board of survey and inspector were sold in New York. Of the stores not returned a portion was unaccounted for, and a portion, it was ascertained from the Signal Bureau, was cached by the relief expedition at Cape Sabine and Littleton Island. The board of survey was informed by letter from the Chief Signal Officer that the Signal Bureau assumed responsibility for all the missing stores, and that they would all be accounted for.

Spring and summer of 1883.

In March, 1883, a requisition was received at this office for a large amount of stores for the Franklin Bay expedition, accompanied by letter from the Signal Bureau, stating that, "In the sundry civil bill which passed the recent Congress the sum of $5,000 was appropriated for the purchase of these stores, but owing to some oversight this money was not made immediately available, as was the money for the expenses of the expedition," and suggesting, therefore, that the Subsistence Department be directed to purchase the stores, with the understanding that it was to be reimbursed "as soon as the appropriation made in the sundry civil bill becomes available." The attention of the Secretary of War was invited by the Commissary-General of Subsistence to the fact that the large quantity of stores called for would cost more than the sum appropriated, and he recommended that, if purchased by the Subsistence Department, the amount be limited to $5,000. To this the Chief Signal Officer replied that "the stores are absolutely necessary, and that it is necessary to replace the stores sent back from St. John's, Newfoundland, to New York, and to provide, in addition, a supply for Lieutenant Greely's party for the time which will probably be spent at Littleton Island before the ship can get up in 1884." As the case was evidently an urgent one, the stores being, as stated by the Chief Signal Officer, "absolutely necessary" for the expedition to Lady Franklin Bay, and

for the party already there, supplies to the amount of $9,916.27 were, by authority of the Secretary of War, furnished by the Subsistence Department in May last, with the understanding that reimbursement to the extent of $5,000 would be made to it from the appropriation made in the sundry civil bill for purchases of subsistence supplies for the expedition.

ISSUES TO INDIANS.

Subsistence supplies were issued to Indians during the fiscal year ended June 30, 1883, to the following amounts:

Date.	To whom issued.	Amount.
July, 1882, to April, 1883	To Sitting Bull's band of Uncapapa Sioux Indian prisoners of war at Fort Randall, Dakota.	$8,529 28
May and June, 1883	To same as above at Fort Yates, Dakota	728 53
July, 1882, to June, 1883	To Warm Spring Apache Indian prisoners of war at Fort Union, New Mexico.	1,732 63
October, 1882, to June, 1883	To Apache and Ute prisoners of war at Fort Riley, Kansas.	274 72
April and May, 1883	To Cree Indian prisoners at Fort Assinniboine, Montana Territory.	314 11
May and June, 1883	To Cree Indian prisoners at Fort Maginnis, Montana Territory.	111 19
April, May, and June, 1883	To Chiricahua Indian prisoners of war in the field and at San Carlos, Arizona Territory.	2,125 09
July, 1882, to June, 1883	To Indian prisoners of war at various posts and of different tribes.	214 91
May, 1883	To Creek Indian prisoners at Fort Reno, Indian Territory.	49 23
May and June, 1883	To Creek Indian prisoners at Fort Gibson, Indian Territory.	4,682 04
July, 1882, to June, 1883	To Indians visiting posts under Army Regulations 2182 and 2183.	678 84
July, 1882, to June, 1883	To friendly Indians	168 94
July, 1882, to June, 1883	To destitute Indians	603 81
Total		20,213 31

Being $16,983.41 less than in the previous year.

MISCELLANEOUS ISSUES AND EXPENDITURES.

In the fiscal year ended June 30, 1883, commanding officers caused 4,865 rations to be issued in cases not specially provided for by regulations. Of these 1,027 were for the subsistence of citizens held in military custody; 2,072 were for citizens within the sanitary cordon in the vicinity of Fort Brown, Tex., during a yellow fever epidemic; 105 for Mexican women recaptured from the Chiricahua Indians by Brigadier-General Crook's command in Mexico, in June, 1883. The remainder were issued at remote posts on the frontier to persons suffering and destitute, who might without such aid have perished.

In September, October, November, and December, 1882, 3,119 rations were issued to enlisted men of the United States Marine Corps while at Mount Vernon Barracks, Ala.

For the subsistence of recruiting parties and recruits at rendezvous, 88,757½ rations, cooked, were purchased at a cost of $44,955.46, or at an average cost of $50\frac{6537}{10000}$ cents per ration (or board for one day), an increase of a little more than eight-tenths of a cent per ration over the average for the previous year. The disbursements for liquid coffee for enlisted men traveling by cars, stages, &c., amounted $8,867.60; for extra duty service of enlisted men detailed for duty in the subsistence department at posts, $12,830.80; for advertising for proposals, &c., $6,010.84.

LOSSES OF STORES AND PROPERTY.

The returns of subsistence stores for the fiscal year ended June 30, 1883, show losses in transportation for which no one was found responsible, and by extraordinary wastage, &c., amounting to $13,350.21, which is $596.89 less than losses from like causes in the preceding fiscal year.

During the fiscal year stores were lost in transportation and the responsibility therefor fixed, amounting to		$1,719 75
Of this there has been collected and accounted for by officers, or covered into the Treasury	$929 24	
And there has been collected, but not yet covered in	37 00	
		966 24
Leaving a balance yet to be collected of		753 51

The following losses, also, have been reported as having occurred by storm, fire, accident, theft, &c., during the fiscal year:

Where.	Cause, per reports.	When.	Value.
In the field, Texas	By accident	Reported in July and August, 1882.	$11 21
At Fort Hale, Dak	By death (cattle)	Reported in August, 1883	88 44
At Fort Bowie, Ariz	By storm	August 4, 1882	13 10
At Fort Columbus, New York Harbor.	By theft	Reported in August, 1883	5 76
At Fort Meade, Dak	By death (cattle)	Reported in September and October, 1882.	186 43
At Fort Stevenson, Dak	do	Reported in September, 1883.	57 60
At Fort Warren, Mass	By theft	Reported in October and December, 1882.	110 48
At Ojo Caliente, N. Mex	By fire	Reported October, 1882	26 67
At Camp Price, Ariz	By rain storm	do	7 02
At Fort Lowell, Ariz	By theft	do	313 83
At Fort Sill, Ind. T	do	Reported December, 1882	179 55
At Fort Sidney, Nebr	By rats	do	14 96
At Fort Stevenson, Dak	By death (cattle)	January 19, 1883	50 76
At Fort Huachuca, Ariz	By theft	Reported in February, 1883	4 75
En route to Fort Spokane, Wash.	do	February 7, 1883	21 40
At Rocky Point, en route to Fort Maginnis, Mont.	do	Reported in March, 1883	2 80
In the field, near Richmond, N. Mex.	Accident	Reported in April, 1883	18 85
At Fort Bowie, Ariz	By theft	Reported in May, 1883	26 19
At Fort McDermitt, Nev	By fire	February 9, 1883	13 05
At Fort McKavett, Tex	By theft	April 17, 1883	10 52
Between Pagosa Springs, Col., and Amargo, N. Mex.	Accident	March 6, 1883	7 10
En route to camp, Poplar River, Mont.	Wreck	May 8, 1883	203 80
En route to and near Fort Verde, Ariz.	Contact with small-pox patient during transportation.	Reported in June, 1883	510 17
En route to Lady Franklin Bay, and returning to New York.	Part cached at Cape Sabine and Littleton Island, and part unaccounted for	Between June, 1882, and February, 1883.	337 75
Total			2,222 18

The subsistence stores brought before inspectors and condemned during the fiscal year, as reported on returns from all parts of the country, was in value, at original cost, $21.330.06; there was realized from the sale of these $6,669.02; leaving a net loss of $14,661.04, which is less than 1 per cent. on the value of all stores supplied. When it is remembered that articles of food are in their nature very perishable, and that they are necessarily subjected to exposure and the deteriorating influences of the extremes of heat and cold on the long routes over which they have to be transported, and at the military posts on the frontiers, so small a loss is remarkable, and clearly indicates that the stores must have been of excellent quality and well cared for.

ARMY COOKING.

During the past year a new edition of the Manual for Army Cooks has been published. This manual furnishes to the troops numerous useful receipts for cooking articles supplied by the Subsistence Department, and usually obtainable at military posts or camps, and will aid them in securing a variety in cooking which is known to be conducive to their health and comfort. The full benefit, however, cannot be attained unless the troops actually receive and are permitted to use the whole of the ration allowed by law. Flour, for example, is often required for use in the company kitchen; but, under existing regulations, all the flour ration drawn by companies must be turned into the post bakery, the savings of which do not go to the company, but to the post fund, and what flour is required in the kitchen has to be purchased out of the company fund, raised by savings on other parts of the ration. It is well known that the ration of flour allowed by law, and issued by the Subsistence Department, is ample, but only about two-thirds of it reaches the soldier. In my opinion, the regulation in regard to carrying the saving on flour belonging to companies to the credit of the post fund should be so amended as to provide expressly that the soldier shall have the benefit of the whole flour ration (deducting only the expenses of converting it into bread), and to this end that the net savings on the flour, arising from making it into bread, shall (after deducting expenses of bakery) be divided among the companies in proportion to the flour contributed by each company to the bakery.

I have, in several previous reports, invited attention to the necessity of providing good cooks and bakers for the Army. They are essential for preserving the health and securing the comfort and efficiency of the troops. It matters not how great in quantity or how good in quality may be the raw articles of food furnished by the Subsistence Department, the soldier will not be sufficiently or properly and wholesomely subsisted if the articles are not properly cooked. The best flour in the hands of a bad baker will produce bad bread, and the best of meat and vegetables will, from the hands of a poor cook, afford the soldier only unwholesome and unpalatable food. It would, therefore, be in the interest of the well-being of the soldier, if provision were made by law for the special enlistment of men as cooks and bakers. Of cooks there should be one for each company, troop, or battery, and of bakers, one to each garrisoned military post or station. I commend the matter to the attention of higher authority and of Congress.

CIVIL EMPLOYÉS IN THE SUBSISTENCE DEPARTMENT OF THE ARMY.

The act making appropriations for the support of the Army for the fiscal year 1884, limited the amount that could be applied to the payment of employés of the Subsistence Department of the Army, in that fiscal year, to $105,000.

Prior to the passage of the act I was called upon to report the lowest number of employés necessary in the Subsistence Department, and the least amount that need be paid them. The following is an extract from that report, dated January 29, 1883:

> The number of employés paid from the appropriation for subsistence of the Army, as well as their compensation, is regulated by the Secretary of War, and the number authorized by him under date June 30, 1875, is limited to 61 clerks and 87 others—

total, 148. The number employed and salaries paid are carefully scrutinized by me, and both are reduced whenever and wherever the interests of the service will permit. When practicable to make a reduction, I have caused it to be made without waiting for orders to do so, and constantly keep the force within the limit fixed by the Secretary of War. I have caused reductions to be made from time to time until, as shown by inclosed report, the number employed is only 51 clerks and 62 others, being 35 less than authorized. * * * The number is kept at the lowest limit possible, consistent with efficient service, and the same man is often required to perform several duties, as of cooper and laborer, clerk and inspector. The employés are efficient men and experienced in their duties in the department, and I do not consider that it is practicable, without injury to the service, to reduce the present number or their compensation. In fact any considerable movement of troops or active operations would require an immediate increase.

Although the number and compensation of the employés in the Subsistence Department were already, in my opinion, as small as was consistent with efficiency, it became necessary to reduce them still further, in order to bring the expenditure within the amount appropriated, and before the commencement of the present fiscal year the necessary instructions were sent to officers of the department throughout the country reducing the amounts heretofore authorized, necessitating the discharge of some, and a considerable reduction in the salaries of others. The experience of the past three months since the reduction was made has confirmed me in the views expressed in my report above quoted.

The officers of the department, almost without exception, have already requested an increase in the allotment at their stations, urging that it is impracticable to conduct the business of the department intrusted to them with the promptness, care, and efficiency that the best interests of the service require, unless the amount allowed for payment of employés is increased. These officers are men of experience, thoroughly understand their duties, and have the interest of the service at heart. They represent that, although the employés who have served with them for many years still continue with them on the reduced pay, in hope that the former rates will be restored next year, they cannot be retained much longer at these rates, and that it will not be practicable to fill their places at such rates with experienced and competent men. In view of the fact that the number of employés absolutely necessary at the various stations depends entirely upon the amount of work to be done, which varies with the exigencies of the service, it would seem that the number and compensation of employés should be left, as heretofore, to the discretion of the Commissary-General, under the supervision and direction of the Secretary of War. The fact that, as shown by the records and reports, the number and compensation of employés in the Subsistence Department have been in the past kept at the lowest point consistent with efficiency, habitually considerably below the limit then fixed, would seem to indicate that the regulation of their number might, in the future, as in the past, be safely left to the head of the bureau under the direction of the Secretary of War, the more especially as in case of any exigency creating an unusual demand, such a restriction as now exists, would very seriously cripple the efficiency of the department. I therefore hope that the Secretary of War will invite attention to the matter and recommend that the next appropriation for subsistence of the Army be made without this recent restriction, leaving to the War Department, as heretofore, the duty of regulating the number and compensation of employés for the Subsistence Department according to the varying necessities of the service.

COMMISSARY SERGEANTS.

At the commencement of the last fiscal year the number of commissary sergeants in service was		146
During the year the following were discharged:		
At their own request	9	
By reason of expiration of term of service	1	
By sentence of court-martial	2	
For incompetency or unfitness	3	
On surgeon's certificate of disability	2	
	—	17
		129
There were appointed during the year		5
Total in service June 30, 1883		134

The administrative duties of the Subsistence Department at the various posts required the introduction of a new class of non-commissioned staff officers into the Army, and the grade of commissary sergeants was authorized by Congress in 1873, upon the recommendation of the Commissary-General of Subsistence, approved by the Secretary of War. The grade was professedly created "for the purpose of attaching to the Subsistence Department an intelligent corps of non-commissioned officers, whose experience would be of value to the department." The experience of ten years has fulfilled anticipations and demonstrated the value to the Army of these sergeants, picked men, carefully selected from worthy soldiers whose character and capacity have been shown during the years of faithful service they must render before they are eligible to appointment. They hold an honorable position, take a pride in their duties, and by their knowledge of and attention to the stores on hand, guard them from the damage to which, without constant care, they would be exposed. With very rare exceptions they have shown themselves worthy of the trust confided to them, and have amply repaid the Government all they have cost it.

ACCOUNTS AND RETURNS.

Accounts and returns on hand June 30, 1882, received and examined during the fiscal year ended June 30, 1883, and on hand June 30, 1883, awaiting examination, as follows:

On hand June 30, 1882, accounts current	246
Received during year ended June 30, 1883, accounts current	2,664
On hand June 30, 1882, returns of subsistence stores	247
Received during year ended June 30, 1883, returns of subsistence stores	2,156
On hand June 30, 1882, returns of subsistence property	2
Received during year ended June 30, 1883, returns of subsistence property	860
Total	6,155

During the fiscal year ended June 30, 1883, accounts and returns were examined and sent to Third Auditor, as follows:

Accounts current, 2,656, with 41,300 vouchers; returns of subsistence stores, 2,153, with 30,896 vouchers; returns of subsistence property, 857, with 2,210 vouchers.

On hand at close of fiscal year ended June 30, 1883, awaiting examination:

Accounts current	254
Returns of subsistence stores	230
Returns of subsistence property	5
Total	489

In connection with the examination of the foregoing, 5,146 letters were written, 1,097 referred, and 294 papers copied. Eight hundred and

three returns of official postage-stamps, accompanied by 2,276 vouchers, were examined and filed during same fiscal year.

CLAIMS.

Act of July 4, 1864 (section 300 B, Revised Statutes).

There were on file in this office on July 1, 1882, awaiting examination under the third section of the act of July 4, 1864, and the acts and joint resolutions supplementary to said act, 715 claims; during the year 32 more were received from the office of the Third Auditor of the Treasury, and that of the Quartermaster-General of the Army, for consideration, and 3 disallowed (old) claims were reopened upon additional evidence, making, in all, 750 claims to be acted upon.

Formal decisions were rendered during this period in 634 cases of this class of claims. Of these 23, amounting to $4,414.37, were allowed in the sum of $2,567.23, and recommended to the Third Auditor of the Treasury for payment, and 611, amounting to $395,070.88, were disallowed.

There remained on hand July 1, 1883, awaiting examination and decision, under this act, 116 claims.

It now seems probable that during the current fiscal year all claims originally filed in this office under the act of July 4, 1864 (300 B, Revised Statutes), will be examined and passed upon by the Commissary-General of Subsistence, as required by the statute. Some new claims under that statute may be received by reference from the Third Auditor of the Treasury for examination and recommendation. These belong to a class involving both quartermaster and subsistence supplies, filed in the office of the Quartermaster-General prior to January 1, 1880. Having been there examined in relation to the quartermaster's items, they will also require examination by the Commissary-General of Subsistence as to the subsistence items.

The wisdom of the act of March 3, 1879, barring the further presentation of claims under 300 B, Revised Statutes, becomes more and more apparent as we recede from the period between 1861 and 1864, in which these war claims originated. As early as 1872, the Commissary-General of Subsistence in his annual report stated:

> The task, originally very difficult, of investigating and deciding these cases with equity and justice, becomes daily more so from the passing away by deaths and removals, and from imperfect memories after lapse of so long a period, of so many officers and others alleged to have taken or received the stores, or to have knowledge of them, * * * while these very difficulties but add security, f not increased facilities, to the prosecution of fraudulent claims, * * * and a proper examination of them requires more time and attention than the Commissary-General is able to give them, without neglecting other and, in my opinion, more important duties appertaining to the Subsistence Department, and he should be relieved from this duty.

Each year's experience furnishes additional proof of the correctness of these views, and now, ten years later, it is found, except in very rare cases, that officers and others, when appealed to concerning the facts of these claims, can give but vague and unsatisfactory information, founded on fragmentary impressions lingering in their memories, if they retain any recollection whatever of such matters occurring from eighteen to twenty years ago, and which were not then regarded of more than passing importance.

Further legislation is greatly needed as to claims filed in this office under the act of July 4, 1864, that have been examined and not recommended for payment by myself or predecessors. The act of 1864 is explicit as to the disposition to be made of the claims in which a decision favorable to the claimant is reached by the Commissary-General of Sub-

sistence. He is required "to report each case for payment to the Third Auditor of the Treasury, with recommendation for settlement." The act is not so clear as to what disposition is to be made of the claims in which the decision is against the claimant. There is no expressed limitation as to the time within which the claims are to be considered, nor as to the number of times they can be reopened and re-examined. As a result, claimants, either directly or by former or new attorneys, press upon the Commissary-General of Subsistence the reopening and re-examination of claims that have been years before carefully examined and decided adversely to the claimant.

I have frequently, heretofore, in my annual reports recommended that the examination of this whole class of war claims be transferred from this bureau to some other tribunal.

I now earnestly recommend that Congress be urged to fix some future date for the termination of action by the Commissary-General of Subsistence under 300 B, Revised Statutes, and that some tribunal be established or designated, to which all such claims on file in this office, whether pending or disallowed, shall be transferred. I make this recommendation, being satisfied that the best interests of the Government will be subserved thereby.

Joint resolutions of July 25, 1866, and third section of act of March 2, 1867.

At the commencement of the fiscal year there were on file in this office 1,512 claims for commutation of rations to Union soldiers while held as prisoners of war, and during the year 1,489 claims were received, making a total of 3,001 claims of this class for examination. Of these, 111 were not reached for examination; 1,860 were partially examined; 1,030 examined and decided, of which 752 were rejected, and 278, amounting to $10,460 were allowed and recommended to the Third Auditor of the Treasury for payment. Besides this, 9 rejected (old) claims were re-examined upon additional evidence, and again rejected.

Miscellaneous claims.

In addition to claims under the above-mentioned special acts of Congress, there were at the commencement of the fiscal year 503 miscellaneous claims on hand, and during the year 405 claims were received. Of these 908 claims, 144 were recommended for payment in the aggregate sum of $1,477.03; 278 were rejected; 476 were partially examined, and 10 were not reached for examination. Besides these, 27 rejected (old) claims were re-examined upon additional evidence and again rejected.

Letters and indorsements.

In connection with the three classes of claims mentioned, 10,473 communications were sent out during the year. Besides this, many briefs of evidence and extended examinations of official records were made.

DUTIES AND STATIONS OF OFFICERS OF THE SUBSISTENCE DEPARTMENT.

The duties and stations of officers of the Subsistence Department on the 30th day of June, 1883, will appear from the roster hereto appended.

During the year the officers of the department have been actively and efficiently employed.

Very respectfully, your obedient servant,

R. MACFEELY,
Commissary-General of Subsistence.

Hon. the SECRETARY OF WAR.

REPORT OF THE SURGEON-GENERAL.

WAR DEPARTMENT,
SURGEON-GENERAL'S OFFICE,
Washington, October 1, 1883.

SIR: I have the honor to submit the following statement of finances and general transactions of the Medical Department of the Army for the fiscal year ending June 30, 1883:

FINANCIAL STATEMENT.

Medical and Hospital Department, 1879, and prior years:		
Appropriated by act of August 5, 1882, Statutes 22,277		$1,205 96
Disbursed during the year		1,205 96
Medical and Hospital Department 1880, and prior years:		
Appropriated by act of March 3, 1883, Statutes 22,597		477 20
Disbursed during the year		477 20
Medical and Hospital Department, 1881:		
Balance from previous fiscal year		652 59
Refunded during the year		6 03
		658 62
Disbursed during the year	$229 35	
Carried to the surplus fund	429 27	
		658 62
Medical and Hospital Department, 1882:		
Balance from previous fiscal year		32,009 38
Refunded for supplies lost, sold, &c		343 07
Total to be accounted for		32,352 42
Disbursed during the year		32,227 76
Balance June 30, 1883		124 69
Medical and Hospital Department, 1883:		
Appropriated by act of June 30, 1882		200,000 00
Received for supplies sold		3,298 48
Total to be accounted for		203,298 48
Disbursed during the year		158,477 09
Balance June 30, 1883		44,821 39

The entire balance remaining at the end of the fiscal year was covered by previous contracts and obligations, and the greater part of the money has since been expended.

Artificial limbs, 1880, and prior years:		
Balance from previous fiscal year		$9,900 94
Transferred under act of March 3, 1875		297 64
Total to be accounted for		10,198 58
Disbursed during the year	$297 64	
Carried to the surplus fund	9,900 94	
		10,198 58
Artificial limbs, 1881:		
Balance from previous fiscal year		3,269 81
Disbursed during the year		1,056 59
Balance June 30, 1883		2,213 22

Artificial limbs, 1882:	
Balance from previous fiscal year	$72,918 85
Disbursed during the year	8,868 06
Balance June 30, 1883	64,050 79
Artificial limbs, 1883:	
Appropriated by act of August 7, 1882	120,000 00
Disbursed during the year	93,669 94
Balance June 30, 1883	26,330 06
Appliances for disabled soldiers, 1881:	
Balance from previous fiscal year	2,369 00
Carried to the surplus fund	2,369 00
Appliances for disabled soldiers, 1882:	
Balance from previous fiscal year	2,750 00
Disbursed during the year	106 00
Balance June 30, 1883	2,644 00
Appliances for disabled soldiers, 1883:	
Appropriated by act of August 7, 1882	2,000 00
Disbursed during the year	221 25
Balance June 30, 1883	1,778 75
Medical and Surgical History:	
Balance from previous fiscal year	9,100 15
Disbursed during the year	565 50
Balance June 30, 1883	8,534 65
Museum and Library, 1882:	
Balance from previous fiscal year	1,284 22
Disbursed during the year	1,284 22
Museum and Library, 1883:	
Appropriated by act of June 30, 1882	10,000 00
Disbursed during the year	7,905 45
Balance June 30, 1883	2,094 55
Expended in furnishing trusses under acts of May 28, 1872, and March 3, 1879	2,098 12

There were furnished during the fiscal year:

In kind:	
Trusses	503
Artificial legs	51
Artificial feet	1
Apparatus for the leg	7
Artificial arms	8
Artificial hands	
Apparatus for arms	
Commuted:	
Trusses	
Artificial legs	201
Artificial feet	30
Apparatus for the leg	371
Artificial arms	420
Artificial hands	16
Apparatus for arms	678

TRUSSES.

In carrying out the laws for furnishing trusses some cases of hardship are found. Persons who held commissions as officers and all persons who were disabled previous to the war for the suppression of the rebellion are absolutely, and those disabled subsequently to this war are practically, excluded from the benefits of these laws, although these persons are pensioned on account of hernia.

It is desirable that the issue of trusses shall correspond to the issue of artificial limbs, as was probably the intention of Congress; that is, that a truss shall be furnished to every one who is ruptured in the line of his duty while serving in the Army or Navy.

MEDICAL AND HOSPITAL SUPPLIES.

The cost of the medical and hospital supplies actually issued during the last fiscal year was $180,139.73.

The cost of the supplies which will be required for issue during the current fiscal year will probably exceed that amount, and I therefore respectfully urge that the necessity for an adequate appropriation to meet the actual expenses of the Medical Department for the fiscal year ending June 30, 1885, be brought to the attention of Congress. I am of the opinion that an appropriation of $250,000 will be required for the purposes set forth in an estimate submitted to you on the 24th of August last, and for the reasons briefly specified in a note thereto.

The act making appropriations for the support of the Army for the fiscal year ending June 30, 1884, approved March 3, 1883, provides:

> That civilian employés of the Army stationed at military posts may, under regulations to be made by the Secretary of War, purchase necessary medical supplies, prescribed by a medical officer of the Army, at cost, with 10 per centum added.

Proceeds of sales under this act must, under section 3618 of the Revised Statutes, be covered into the Treasury. It is very desirable that the proceeds of sales of medical supplies to civilian employés should, if possible, be carried to the current appropriation for the Medical Department of the Army, and the amount become available for replacing the articles sold.

This may have been the intention of the framers of this act, and such Congressional legislation is requested as will permit this course to be taken, and which may be accomplished by excepting "sales of medical supplies to civilian employés of the Army," from the provisions of section 3618 of the Revised Statutes, as is the case with "the sale of commissary stores to the officers and enlisted men of the Army."

HEALTH OF THE ARMY DURING THE FISCAL YEAR ENDING JUNE 30 1883.

The monthly reports of sick and wounded received at this office represent for the year an average mean strength of 20,914 white, 2,390 colored troops, and 208 Indian scouts.

Among the *white troops* the total number of cases of all kinds taken on the sick list was 37,697, being at the rate of 1,802 per 1,000 of mean strength; an increase of 123 cases per 1,000 over the number reported for the previous year, and 68 per 1,000 over the average decennial rate of admissions.

Of this number, 32,833, or 1,570 per 1,000 of mean strength, were taken on sick report for disease, and 4,864, or 232 per 1,000 of mean strength,

for wounds, injuries, and accidents; making the rate per 1,000 of mean strength for the latter somewhat greater than reported for the preceding year, but for the preceding decade 17 per 1,000 less.

The average number constantly on sick report during the year was 993, or 47 per 1,000 of mean strength; an increase of 2 per 1,000 over the previous year, and 3 per 1,000 over the average decennial rate.

Of these, 794, or 38 per 1,000 of strength, were constantly under treatment for disease, and 199, or 9 per 1,000 of strength, for wounds, accidents, and injuries.

The total number of deaths from all causes reported among the white troops was 214, or 10 per 1,000 of mean strength; a rate equal to that reported for the previous year and a decrease of 2.7 per 1,000 below the average of the preceding decade.

Of these, 146, or 7 per 1,000 of mean strength, died of disease, and 68, or 3 per 1,000 of mean strength, of wounds, injuries, and accidents.

The proportion of deaths from all causes to cases treated was 1 to 176; an increase of 15 over the previous year, and 34 over the average of deaths to cases treated during ten years.

The total number of white soldiers reported to have been discharged the service for disability was 879, or 42 per 1,000 of mean strength; an increase of 1 per 1,000 over the number last reported, and 10 per 1,000 over the average of discharges for the decade.

Of these, 785, or 38 per 1,000 of strength, were discharged for disease, and 94, or 4 per 1,000, for the results of wounds and injuries.

Among the *colored troops* the total number of cases of all kinds reported was 4,689, or 1,962 per 1,000 of mean strength; an increase of 152 per 1,000 over the rate reported for the previous year, and 126 per 1,000 over that for the decade preceding.

Of these, 3,872, or 1,620 per 1,000 of strength, were cases of disease, and 817, or 342 per 1,000 of strength, were for wounds, injuries, and accidents; a rate 110 per 1,000 greater than that occurring among the white troops for the same period, and 92 per 1,000 greater than the average rate of wounds and injuries for ten years preceding.

The average number constantly on sick report was 97, or 41 per 1,000 of mean strength; of whom 71, or 30 per 1,000, were under treatment for disease, and 26, or 11 per 1,000, for wounds, injuries, and accidents; a decrease in the average decennial rate of diseases and injuries combined of over 4 cases per 1,000.

The total number of deaths of colored soldiers reported from all causes was 26, or 11 per 1,000 of mean strength.

Of these, 15, or 6 per 1,000, died of disease, and 11, or 5 per 1,000, of wounds, injuries, and accidents; a consolidated death rate the same as reported for the last year, and 5 per 1,000 less than the decennial average. The proportion of deaths from all causes to cases treated was 1 to 180; an increase of 16 over the rate last reported, and 63 over the average decennial rate.

The total number of colored soldiers reported to have been discharged for disability was 101, or 42 per 1,000 of mean strength; a decrease of 1 per 1,000 from the rate last reported, and an increase of 14 per 1,000 over the decennial rate.

Of these 86, or 36 per 1,000, were discharged for disease, and 15, or 6 per 1,000, for the results of wounds and injuries.

The total number of cases reported among the Indian scouts was 44, being at the rate of 212 per 1,000 of mean strength, a decrease of 17 per 1,000 from that of last report. Of these 33 were cases of disease and 11 of wounds, injuries, and accidents.

The total number of deaths was 2, 1 from disease and 1 from wound
The admissions to sick report during the year are shown in tabul
form on Appendix A, with ratios calculated upon the mean strength c
the two classes of troops respectively, and also for the combined force
as reported upon the returns made to this office.

Diseases of the respiratory organs stand first in numerical impo
tance, of which about 64 per cent. are catarrhs of the upper air pa
sages. Extremes of variation in temperature will account in part fo
the frequency of these diseases, but to a larger extent insufficient ven
tilation of barracks and dormitories, as well as irregular and unequa
distribution of artificial heat during cold weather, must be held re
sponsible.

Wounds, injuries, and accidents stand second on the list of cause
impairing the effectiveness of the Army. The large number recorde
in this class may probably be attributed to the use of troops in me
chanical and laborious employments which form so large a proportio
of the soldier's duties. As an indication of the peculiar hardships t
which our troops are exposed, the rates of admission for wounds, acc
dents, and injuries are 122 per 1,000 higher than those reported for th
German army, and 142 per 1,000 higher than the decennial rate of th
British army.

The rate for syphilis and venereal diseases is much lower than migh
have been anticipated, comparing favorably with the reports of foreig
armies in this respect. The vicennial rate for the British army serv
ing in the United Kingdom for venereal diseases of all descriptions i
107 per 1,000, and for constitutional or secondary syphilis 12 per 1,00
of mean strength higher than for United States troops, and the show
ing becomes still more favorable when the fact is considered that med
ical officers of the British service report only such cases as are admitte
to hospital for treatment. In the German army the rate of admissio
for the years 1879 and 1880 was 25 per 1,000 of mean strength lowe
than our rate for venereal disease, and 9 per 1,000 higher for constitu
tional syphilis.

It is interesting to note that the colored troops make a particularl
favorable showing in the small number of admissions for alcoholism
and its results, exhibiting as they do a rate of only 4 per 1,000 to
rate of 76 per 1,000 of mean strength among the whites. On the othe
hand, in diseases of the nervous system, they have an unexplained pre
ponderance.

Four cases of small-pox are reported during the year, a number that
though small in itself must appear to be unnecessarily large when th
returns for the German army are considered, where 2 cases only ar
reported as having occurred from 1879 to 1881, and this small numbe
in a mean aggregate force of over 327,000 officers and men, all of whon
are stationed in thickly populated communities and subjected at all time
to greater exposure from small-pox than our own troops. The thorough
revaccination of every individual of the military establishment, whic
has proven to be so eminently protective in the German army, shoul
be rigidly enforced in our own.

Reference to Appendix B shows the febrile group of diseases to hav
been the most prominent cause of death, furnishing 37, or 1.6 deaths pe
1,000 of the mean strength of the Army. The respiratory group, i
which consumption has been included, contributes 32 deaths, and a rat
that is but a trifle lower than the febrile group. Diseases of the circu
latory system stand third, furnishing 27 deaths and a rate of 1.2 pe
1,000 of mean strength. In the last important group are included al

diseases of the digestive system and the organs of assimilation. These have furnished a total of 24 deaths, and a rate of 1 per 1,000 to the mean strength of the Army.

The principal causes of discharge on "surgeon's certificate of disability" as reported during the year can be briefly noted in the order of numerical importance as follows:

Of diseases of the brain and nervous system, including insanity, there were reported 156 cases, or over 6 per 1,000 of the mean strength of the Army. Diseases of the respiratory group, including consumption, contributed 97 cases, and diseases of the digestive and assimilative organs 98 cases, or for each group 4 per 1,000; the circulatory system 90 cases, or 3.9 per 1,000. Constitutional syphilis and chronic rheumatism each 89 cases, or 3.8 per 1,000. Diseases of the organs of special sense, 76 cases, or 3.3 per 1,000; and genito-urinary diseases, non-venereal, 61 cases, or 2.6 per 1,000 of the mean strength of the Army.

YELLOW FEVER AT FORT BROWN, TEXAS.

I have to report that a limited and exceptionally mild epidemic of yellow fever occurred among the troops stationed at Fort Brown, Tex., during the months of August, September, October, and November, 1882.

The first case reported in the garrison was that of Private William Busching, band, Nineteenth Infantry, who appears to have contracted the disease in the adjoining town of Matamoras, Mexico, where it then prevailed. He was admitted to hospital on the 1st of August, and died on the 4th, with black vomit and oozing of blood from the soles of his feet. During the month 4 other cases occurred among the troops, but no deaths. In September 20 cases occurred, with 1 death; in October 9 cases and 1 death; in November 2 cases and no deaths; making a total, as reported on nominal lists furnished to this office, of 36 cases and 3 deaths. At this time Fort Brown was garrisoned by the headquarters, regimental staff, band, and six companies of the Nineteenth United States Infantry, and one company of the Eighth Cavalry. The mean strength of command during the four months mentioned is reported as 20 officers, 294 enlisted men, or a total of 314; so that the whole number of cases of fever was but 115 per 1,000 of mean strength, and 120 per 1,000 of all cases of sickness reported, while the death rate was but little more than 8 per cent. of the number attacked. Among the families of officers and soldiers, together with the civilian employés of the post, 32 were attacked and 3 died, or 160 per 1,000 of persons so exposed, and a death rate of 9 per cent. of cases treated.

The commissioned officers who are reported to have suffered were Capt. Charles T. Witherell, Nineteenth Infantry, Capt. William J. Lyster and First Lieut. Thomas M. Wenie, of the same regiment, and Assist. Surg. W. C. Gorgas, United States Army; Hospital Steward S. W. Reynolds, United States Army, also contracted the disease. Of these, all recovered save Lieutenant Wenie, who died on the fifth day after his seizure.

Measures for preventing the spread of the disease appear to have been promptly enforced; isolation of the sick and a thorough police and disinfection of the post was tried but unfortunately without success. Abandonment of the infected locality on the twenty-third day of the epidemic was followed by better results, as only 3 cases are reported in the camp which was pitched a few miles from the fort; and as these occurred within three days after the move the men may be considered to

have been infected before their departure. The removal of a portion the command from the northern to the southern part of the garrison a pears to have materially checked the progress of the disease, and a su sequent move of the same troops on the forty-third day of the epidem to camp, from which, as in the former instance, only 3 new cases we sent back to the fort, practically brought it to a close.

RECRUITING OF THE ARMY.

The number of recruits reported to have been examined by Arn medical officers and private physicians during the year is 5,964 whit 426 black, and 247 Indian scouts. The total number of rejections wa for white, 2,063, or 346 per 1,000 of the number examined; and f black, 131, or 307 per 1,000; Indian scouts, none.

Primary inspections were made at military posts and at various r cruiting rendezvous, and of such examinations 1,944 white and 126 c ored were rejected. On secondary examination at recruiting depo 120 white and 5 colored were found disqualified.

Appendix C exhibits in tabular form the number of rejections a causes therefor, together with the rate per thousand for each disea and group reported.

WORK PERFORMED IN THE RECORD AND PENSION DIVISION.

The total number of official demands upon this division during t fiscal year for information as to the cause of death in the case of d ceased soldiers and the hospital record of invalids, was 119,580, bei 57,950 in excess of similar applications during the previous year, a an increase of 89,576 cases over the yearly average of demands for t decade preceding. In addition to this large number there remain unanswered on the 30th of June, 1882, 21,959 applications, making all 141,539 cases to be disposed of within as short a period of time practicable.

Of the new cases 117,159 were from the Commissioner of Pension 1,878 from the Adjutant-General of the Army, and 543 from misc laneous sources.

In anticipation of the great number of cases in which reports fro hospital records would be required by the Commissioner of Pensio during the fiscal year ending June 30, 1883, Congress, by act approv August 5, 1882, increased the clerical force of this office and direct that not less than three hundred clerks "be exclusively engaged in pr paring and making reports to expedite the settlement of pension a plications called for by the Commissioner of Pensions." The numb of clerks on duty in the record and pension division is now somewh in excess of the number required to be engaged upon pension wor and at no time since all the vacancies under the act of August 5, 188 have been filled has the number been less than that specified in the ac viz, three hundred.

As the result of the labors of the increased force I have to repo that during the year replies have been furnished to the proper autho ties in 109,007 cases. Of these, 106,798 were to the Commissioner Pensions, 1,680 to the Adjutant-General of the Army, and 529 to mi cellaneous applicants; leaving 32,532 searches and replies yet to be mad In addition to the number of reports above stated as furnished t Commissioner of Pensions 1,343 have been prepared and furnished t same officer by the administrative and miscellaneous branch of t

office, making a total of 108,141 reports in pension cases furnished during the year.

It will perhaps be of interest to exhibit, in brief, the work of the record and pension division during ten years preceding, and, by means of the subjoined table, establish a basis for comparison of the results of that decade and the year now reported.

Fiscal year ending—	No. of cases received.	No. of cases returned.	Average No. of clerks employed during the year.
June 30, 1873	16,601	19,875	99
June 30, 1874	17,957	18,535	96
June 30, 1875	20,332	15,542	64
June 30, 1876	25,406	18,252	68
June 30, 1877	20,428	14,650	53
June 30, 1878	21,074	22,927	67
June 30, 1879	22,339	35,183	96
June 30, 1880	39,241	36,277	115
June 30, 1881	55,040	40,596	151
June 30, 1882	61,630	61,079	176
Totals for the ten years	300,048	282,916	985
Annual average	30,004	28,291	98.5
Fiscal year ending June 30, 1883	119,580	109,007	*290

*These figures show the average for the fiscal year—July 1, 1882, to June 30, 1883. This office did not secure its full complement of clerks until March, 1883, and no appointments were made under the act of August 5, 1882, until the latter part of August, 1882.

From these figures it appears that, while the annual average number of cases returned per clerk employed in the division during the ten years noted was 287.22, the average number of cases returned per clerk during the fiscal year ending June 30, 1883, was 375.88, a gratifying increase of 30 per cent. above the average number of cases returned per clerk during the previous decade, and a daily average of work nearly equal to that of the fiscal year ending June 30, 1879, when the highest average per clerk in the history of the division was reached.

It is believed that this increase of efficiency is permanent, and that the coming year will show not only a larger aggregate of searches and reports, but also progressive improvement in the thoroughness of the work performed, and, in consideration of these facts, I think it may be safely estimated that, should the demands upon this division not exceed the average monthly receipts of the latter part of the fiscal year, the accumulated surplus of cases now on hand will be disposed of within the period contemplated by the framers of the act of August 5, 1882. With reference to this it is proper to further state that a full and economical employment of the present large force necessitates a constant working margin of fully 10,000 cases, and when the number remaining on hand shall fall below that figure, a proportionate reduction will be made of the number of searchers, and the clerks so relieved transferred to the work of copying worn and mutilated records.

In my last report I mentioned the pressing necessity for the detail of as many men as could be spared upon this important work; and immediately upon the increase of the clerical force 17 were assigned to that duty.

The following is a summary of their work for the ten months during which they have been so employed: 15,442 folios have been transcribed, containing altogether 545,523 separate entries, each entry consisting of a soldier's name, his military description, the disease or injury for which

he was treated, and in surgical cases a brief description of operation performed; also, the dates of admission and disposition of the patien and accompanying remarks. In addition to these special entries, the have been copied a large number of prescription records, the great part of which were written with lead pencil, and are now so illegib as to be decipherable by experts alone.

In the surgical division copyists have also been employed in transcribin and arranging, alphabetically, entries from a large number of casual lists that, in the hands of the searchers of this division, are fast goin to destruction.

There are now on hand (June 30, 1883), in addition to those alread reported as transcribed, 20,605 folios, containing 740,072 entries, th should be immediately copied, and this work, in addition to the lar number of folios that are constantly accumulating, will furnish emplo ment for 50 copyists during the next two years, or for a larger numb during a less period of time.

On the third of November, 1882, a circular was addressed to the me ical directors of the several military departments, requiring all co pleted registers of sick and wounded, then on file at posts and arsenal to be forwarded to this office for examination and permanent deposi From these posts, and from medical officers of volunteers who still ha in their possession registers of their several regiments and hospital 623 volumes have been received, making the total number now on fi in this office 18,845 volumes.

In the subdivision of current reports 2,352 monthly reports of sic and wounded from 336 stations and moving commands were receive and filed, together with 967 reports of examinations of recruits, and 7 reports of meteorological observations; 240 deaths were recorded as ha ing occurred among United States troops and 980 discharges for dis bility.

In addition to these, 160 special reports of interesting medical cas that have occurred during the year, and 152 reports showing the san tary condition of the several military posts and arsenals, were also r ceived.

Upon the increase of the clerical force of the office, additional offic room became necessary for the accommodation of the record and pe sion division, since all the available space in the building on Tent street was occupied and already overcrowded, and to provide for th necessity the Secretary of War authorized the leasing of buildings No 935, 937, and 939 F street, and they were accordingly secured. The r cords were then divided, those pertaining to the Atlantic and Gu States and the Territories being retained in the record room of the Me ical Museum to form Section A, while those pertaining to other State were transferred to the new quarters to form Section B.

As has been stated in my former reports, great apprehension is at a times entertained as to the safety of these invaluable documents, th loss of which would add countless difficulties to the adjustment of th large number of claims still pending against the Government. N only has every precaution been taken to control a fire within the buil ings mentioned, but means have also been devised for the rescue of th more important volumes. In Section B nearly 6,000 hospital registe and death and discharge registers have been placed on the ground flo and in truck cases, which are so arranged that in the event of dang they can be run out of the building into the street; in Section A (whic is located in the building on Tenth street) a similar plan has bee adopted for the rescue of 3,000 additional registers. It is believed th

if sufficient warning can be given the greater part of such records as are indispensable to the pension work of this office will probably be saved.

DIVISION OF SURGICAL RECORDS.

The number of wounds, accidents, and injuries recorded in Class V during the fiscal year ending June 30, 1883, was 5,692 in a mean strength of the Army of 23,512. Eighty deaths from wounds received in action or from other violent causes were reported; a proportion of 3.4 per 1,000 of the mean strength.

Two thousand three hundred and four surgical reports were received from medical officers in charge of post hospitals or detachments of the Army in the field or expeditions against hostile Indians; 1,612 were reports of sick and wounded and of operations; 60 were special reports of interesting cases; 476 were reports of a miscellaneous nature; 2 were lists of casualties, and 154 were histories of specimens contributed to the Army Medical Museum.

The casualties from actual warfare during the last fiscal year were few, only two reports of this nature having been received: (1.) On the 17th of July, 1882, a fight occurred at Chevallon's Fork, Arizona, about 50 miles from Fort Verde, between hostile Apaches and detachments of the Third and Sixth Cavalry, accompanied by Indian scouts. One of the latter was instantly killed and a private of the Sixth Cavalry died six hours after the engagement from a wound of the shoulder. Besides these, 5 men of the Sixth Cavalry and 2 of the Third Cavalry and 1 Indian scout were wounded. The casualties were reported by Acting Assist. Surg. C. H. Allen and C. B. Ewing. (2.) Capt. and Assist. Surg. J. C. Merrill reports that in a skirmish near Fort Custer, Mont., on November 8, 1882, an Indian scout received a severe shot wound of the left thigh.

Of the 5,692 wounds and injuries reported during the year, 239 were injuries of the head, 596 of the face, 26 of the neck, 480 of the trunk, 1,371 of the upper extremities, 1,198 of the lower extremities, 1,526 sprains, 54 dislocations, 115 simple fractures and 87 injuries of a miscellaneous character, including cases of poisoning, homicide, suicide, and drowning.

One hundred and twenty-one operations were performed; 42 were amputations, 2 excisions, and 77 miscellaneous operations. Of the 42 amputations, 3 were amputations in the humerus, 3 of the hand, 25 of the fingers, 2 of the thigh, 2 of the leg, 1 of the foot, and 6 of the toes. The miscellaneous operations consisted of removals of fragments of bone, of missiles and other foreign substances, reductions of fractures and dislocations, removals of tumors and operations for strictures, phymosis, varicocele, hydrocele, hæmorrhoids, &c.

A large portion of the clerical force of this division has been employed during the last year in making an index of the cases of wounds and injuries reported on the casualty lists prepared during the war by the chief medical officers of commands in the field. These lists cover almost every engagement during the entire war, containing over 250,000 names, and are referred to in every case of application for pension alleging disability in consequence of wound. These slips, arranged alphabetically according to States, form a temporary index. This part of the work has been completed, the duplicated names have been consolidated, and the slips assorted and filed for ready reference. They contain, as nearly as can be ascertained, 80 per cent. of the wounds received in the various

battles during the war. By means of this temporary index information has been furnished in 9,082 cases of application for pension.

The index largely saves the use of the manuscripts and also the time of the searcher; thus where it was only possible to search about 12 cases a day between 50 and 60 can now be searched.

Registers, arranged alphabetically according to States, have been provided for permanent indices, and 46,000 names have so far been entered thereon from the slips. The slips are not destroyed, but after the entries in the permanent registers have been made are rearranged according to regiments, thus making a second index. By the use of the latter, cases in which the name is misspelled and which would thus escape the searcher of the alphabetical State register are constantly being identified among the slips arranged according to regimental organizations.

As a matter of statistical interest it may here be stated that the 199,201 cases thus recorded are distributed among the States as follows:

New York	37,59
Pennsylvania	26,52
Ohio	23,81
Illinois	17,18
Indiana	15,52
Massachusetts	9,08
Michigan	7,09
Iowa	6,10
Maine	6,40
Wisconsin	5,91
Kentucky	5,55
New Jersey	5,12
Missouri	3,94
New Hampshire	4,17
Connecticut	3,84
Vermont	3,11
West Virginia	2,36
Maryland	1,30
Minnesota	1,09
Rhode Island	81
Delaware	82
Tennessee	60
Kansas	48
District of Columbia	11
Regulars	5,58
Colored troops	3,90
Troops not designated	1,04

Surgical History of the War.—The third surgical volume, which, at the close of the fiscal year ending June 30, 1882, had been advanced to page 702, has been completed. It presents a volume containing 986 quarto pages, devoted to matters relating to the surgery of the lower extremities, to materia chirurgica, to transportation of wounded by land and water, to the work performed during the war by the medical staff, and the ambulance system, and 38 pages of indices, including a subject-matter index of all the three surgical volumes, making a total of 1,024 pages of printed matter, of which 322 were prepared during the last fiscal year. The volume was completed in time to be laid before the second session of the Forty-seventh Congress in February last.

ARMY MEDICAL MUSEUM.

Six hundred and thirty-eight specimens were added during the last fiscal year to the collection of the Army Medical Museum; 94 of these were purchased and 544 were contributions either by medical officers of the Army or by civil practitioners, and other citizens.

The additions to the collection are distributed in the various sections of the Museum as follows:

Surgical section.

Specimens in Museum, July 1, 1882	7,130
Specimens in Museum, July 1, 1883	7,265
Increase during the year	135

Medical section.

Specimens in Museum, July 1, 1882	1,615
Specimens in Museum, July 1, 1883	1,705
Increase during the year	90

Microscopical section.

Specimens in Museum, July 1, 1882	8,490
Specimens in Museum, July 1, 1883	8,881
Increase during the year	391

Anatomical section.

Specimens in Museum, July 1, 1882	2,138
Specimens in Museum, July 1, 1883	2,143
Increase during the year	5

Section of comparative anatomy.

Specimens in Museum, July 1, 1882	2,467
Specimens in Museum, July 1, 1883	2,481
Increase during the year	14

Miscellaneous section.

Specimens in Museum, July 1, 1882	724
Specimens in Museum, July 1, 1883	727
Increase during the year	3

The contributors to the collection were 9 surgeons, 20 assistant surgeons, 12 acting assistant surgeons, one hospital steward, and 49 citizens.

Thirteen thousand six hundred and fifty visitors registered at the Army Medical Museum during the year.

In 1866 a catalogue of the Army Medical Museum was prepared by this office and printed at the Government Printing-Office. The Museum collection at that time contained 4,719 specimens in the surgical section, 877 in the medical, and 2,120 in microscopical; a total of 7,716 specimens. Since then the number of surgical specimens has been increased to 7,265 of medical specimens to 1,705, and microscopical specimens to 8,881, and three new sections have been added to the collection, viz: An anatomical section, containing 2,143; a section of comparative anatomy, containing 2,481, and a miscellaneous section, containing 727 specimens; making a total of 2,120 specimens now in the Museum collection, of which less than one-third are described in the catalogue of 1866.

A manuscript catalogue is now in course of preparation, which will include a description of all specimens in the Museum at the present time. As such a catalogue is indispensable to the practical usefulness of so valuable a collection, it is hoped that authority may be granted by Congress for the printing and binding of this work at the Government Printing-Office.

LIBRARY.

The additions to the library during the past year include 3,912 v umes and about 5,000 pamphlets, making the total number in the c lection about 60,900 volumes and 68,700 pamphlets.

The printing of volume 4 of the Index Catalogue has been complet and the edition distributed. This volume includes the letter E, and t letter F to "Fizes." The manuscript of Volume V, which will inclu the remainder of F and G and the greater part of H, is in an advanc stage of preparation, and the first part of it is now going to press.

An estimate has been forwarded for printing Volume VI of this c alogue, and it is hoped that the necessary appropriation will be promp granted, as it is very desirable to push the work to completion with little delay as possible.

The use of the library by the medical profession of the country c tinues to steadily increase. The amount of correspondence connect with this work may be inferred from the fact that over 2,000 lett were sent out during the year from this division of the office. Eve effort is made to comply with the many requests for information, books, &c., which are constantly coming in, but it is too often necessa to reply that the desired book or pamphlet is not in the library, ev though it may be new and readily obtainable by purchase. The amou heretofore appropriated for the library is not sufficient to purchase new books and journals, and therefore a selection must be made, whi of course, cannot meet the wants of every one. It is believed that t library has now become of such importance and utility, and is so wid consulted, that it should have the means of placing on its shelves soon as published every new medical work, great or small, in all la guages. To do this, and to supply books required to make its files co plete in those subjects, with regard to which there is the greatest d mand for information, will require an annual appropriation of $10,0 and estimates for this amount have been forwarded.

A NEW FIRE-PROOF BUILDING A NECESSITY FOR THE ARMY MEI CAL MUSEUM AND LIBRARY.

The ever-increasing necessity for a suitable fire-proof building f the accommodation of the Army Medical Museum and the library of t Surgeon General's Office must serve as an apology for again inviti especial attention to the subject.

The constant additions to these collections are not only dangerous overcrowding the building, but serve as embarrassments to the prop classification, care, and preservation of the same.

Notwithstanding the strict precautions taken to guard the Museu building from the danger of fire the greatest peril is ever present the dangerous surroundings, which cannot be controlled.

It is respectfully urged that the attention of Congress may be s pecially called to the great importance to the Army, to the medic profession, and to the nation of providing a suitable fire-proof buildi for the safe deposit of these valuable collections, the destruction which would be an irreparable loss.

PROVIDENCE HOSPITAL.

Under the act of Congress approved March 3, 1883, appropriati $15,000 for "the support and medical treatment of 75 transient paupe medical and surgical patients," I have the honor to state that, by co

tract made with Providence Hospital, Washington, D. C., there have been granted during the fiscal year ending June 30, 1883, 558 permits for the admission to this institution of patients of this class, an average of 46.5 patients per month. In addition to this number it has been found possible, within the limits of said appropriation, to care for a monthly average of 84.75 patients of the same class, who are bed-ridden, infirm, and helpless, who have gradually accumulated in years past and who, but for the favorable terms of the contract, would be thrown upon the charity of the public.

MISCELLANEOUS.

The requirements of the Army as regards medical officers during the past year have been as follows:

Number of permanent posts	144
Number of temporary posts and substations	30
Total	174
Number of military expeditions in the field during the year	5

The services of 8 medical officers were required with these expeditions, and there were also 62 medical officers reported to this office as having been on duty with scouting parties and on other field service during the year.

An Army Medical Examining Board, consisting of Lieut. Col. Joseph B. Brown and Majors B. A. Clements and J. H. Janeway, surgeons United States Army, was convened in New York City on the 1st of March, 1883, for the examination of assistant surgeons for promotion, and of candidates for appointment in the Medical Corps of the Army.

The following is a recapitulation of the work done by the Board thus far during its session:

Number of assistant surgeons examined for promotion		10
Number of candidates for appointment in the Medical Corps invited to appear for examination		48
Number of candidates found qualified	13	
Number of candidates rejected	7	
Number of candidates who withdrew after partial examination	17	
Total number examined		37
Number of candidates who failed to appear for examination		3
Number of candidates who declined to appear for examination		3
Number invited but not yet examined		5

The names of the candidates found qualified will be reported to the Secretary of War in season for their appointments to be submitted to the Senate when Congress assembles in December next.

At the date of the last report of the Surgeon-General there was a vacancy in the office of Assistant Surgeon-General, and six vacancies in the grade of assistant surgeon. Since the date of that report Brig. and Bvt. Maj. Gen. Joseph K. Barnes, retired; one surgeon, with the rank of colonel; one surgeon, with the rank of major; three assistant surgeons, with the rank of captain; one assistant surgeon, with the rank of first lieutenant, and two assistant surgeons on the retired list have died. One assistant surgeon, with the rank of first lieutenant, has resigned. Col. Robert Murray, surgeon, was appointed (by transfer) Assistant Surgeon-General, with the rank of colonel, December 14, 1882. Two surgeons, with the rank of lieutenant-colonel, have been promoted to surgeon, with the rank of colonel; two surgeons, with the rank of major, have been promoted to surgeons, with the rank of lieutenant-

colonel, and three assistant surgeons, with the rank of captain, have been promoted to surgeons, with the rank of major. Fourteen vacancies in the grade of assistant surgeon exist at this date (October 1, 1883) in the Medical Corps of the Army.

There are now nine medical officers on sick leave of absence; of these three have been found incapacitated for active service and recommended for retirement by Army Retiring Boards, viz: Assist. Surg. T. F. Azpell, who has been on sick leave since April 7, 1877; J. W. Buell, who has been on sick leave since August 23, 1877, and W. R. Steinmetz, who has been on sick leave since September 16, 1878. One has been recommended to be brought before an Army Retiring Board with a view to his retirement from active service, viz: Assist. Surg. J. V. DeHanne, who has been on sick leave since June 22, 1879; and three more are regarded as permanently disabled. Four medical officers are on ordinary leaves of absence after a tour of duty on the frontier, leaving 162 medical officers for duty October 1, 1883.

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Surgeon-General, United States Army.

The foregoing annual report of the finances and general transactions of the office of the Surgeon-General, United States Army, was prepared and completed by the late Surgeon-General Charles H. Crane, previous to his death. It is respectfully submitted, without his signature, to the honorable the Secretary of War.

D. L. HUNTINGTON,
Acting Surgeon-General, United States Army.

SURGEON-GENERAL'S OFFICE, *October* 15, 1883.

REPORT OF THE PAYMASTER-GENERAL.

PAYMASTER-GENERAL'S OFFICE,
Washington, D. C., October 10, 1883.

SIR: I have the honor to submit my annual report of the transactions of the Pay Department of the Army for the year ending June 30, 1883.

The tabular statements herewith show in detail the fiscal operations of the Department for that year, summarily stated as follows:

RECEIPTS AND DISBURSEMENTS DURING THE FISCAL YEAR ENDING JUNE 30, 1883.

Balance in hands of paymasters July 1, 1882	$1,385,675 45
Amount received from the Treasury	13,310,247 66
Amount received from soldiers' deposits	407,544 68
Amount received from paymasters' collections	386,842 75
Total to be accounted for	15,490,310 54

Accounted for as follows:

Disbursements:		
To the Army on pay-rolls	$12,325,248 00	
To the Army on Treasury certificates	481,226 31	
To Military Academy	184,460 71	
To volunteers on Treasury certificates	391,239 54	
Total	13,382,164 56	
Surplus funds deposited in Treasury	209,086 93	
Paymasters' collections deposited in Treasury	386,842 75	
Balance in hands of paymasters June 30, 1883	1,452,216 30	
Total accounted for		15,490,310 54

The amount disbursed to the Army on Treasury certificates was principally in the settlement of officers' claims for back pay under the decision rendered in the case of Tyler *vs.* United States. (105 U. S. R., 244.)

Since the date of my last report five officers of this department, having attained the age of 64 years, have been retired under the act of June 30, 1882; one officer has died, and one has been dismissed the service for misappropriation of the public funds. Maj. J. R. Wasson, the officer last referred to, was a defaulter in the sum of $5,452. The amount was made good to the United States during the progress of his trial.

No system of accounting, however perfect, will prevent a corrupt official, who from the nature of his office is necessarily trusted with the custody of funds, from proving recreant to his trust. The highest end that can be attained is the prompt and speedy detection of any attempt to tamper with or misappropriate the funds in his keeping and for which he is accountable. The system now in use in this office it is believed accomplishes this end.

I would recommend the repeal of the proviso of the act of April 20, 1874, which provides that no officer detailed for the purpose of inspecting the accounts of the disbursing officers of the Army shall be in anyway connected with the department or corps making the disbursement. The operation of this law prohibits the detail of officers for the purpose of inspection who, from their intimate knowledge of the accounts to be inspected, and the laws and regulations applicable thereto, are best qualified to detect any irregularity therein, and it compels the selection of officers whose knowledge of accounts is in most cases merely theoretical. The experience of this office shows that an expert accountant, where he is so disposed, can readily conceal his irregularities from such an officer.

Attention has been called through the public press to the duplication of officers' pay accounts in terms that would convey the impression that it is a common practice. It is but justice to the officers of the Army to say that the records of this office show that the instances are rare where an officer is guilty of this offense, and considering the number of officers in the Army the percentage is exceedingly small.

The appropriation for mileage of officers for the fiscal year ending June 30, 1882, was $200,000. This sum before the close of the year was found to be insufficient to meet the demands thereon. An additional sum was asked and Congress appropriated $20,000 to supply the deficiency. Of this $220,000, appropriated for the service of that fiscal year, less than $1,000 remain unexpended. The amount appropriated for the fiscal year ending June 30, 1883, was $180,000. Of this amount it is estimated that full returns will show not to exceed $160,000 expended, showing a saving of near $60,000 in this item.

In this connection I beg leave to again recommend the repeal of so much of the act of July 24, 1876, as forbids payment of mileage over land-grant roads. It will be observed that the provision applies only to officers of the Army, while officers in the civil and naval service are not subject to such restriction. These land-grant roads form only a part of the through lines of travel, and an officer whose orders carry him over one of these roads, cannot avail himself of the cheaper through rates, but is obliged to submit to the local rates for part of his journey and obtain transportation orders from the Quartermaster's Department for the other part. These transportation orders cover merely the bare transportation, compelling the officer to pay the incidental expenses, which the allowance of mileage was intended to cover in addi-

tion to the cost of his fare, from his private purse. This discriminatic against officers of the Army I do not think was contemplated or i tended by the passage of the act referred to.

The number of deposits made by enlisted men under the act of Ma 15, 1872, during the last fiscal year was 7,902, amounting to $407,544.6 As compared with the results of last year this is a decrease in th amount deposited of $41,022.15, but an increase of 1,012 in the numb of deposits. This large increase in the number of deposits is gratif ing, as the number of deposits, not the amount, is the end sought. indicates that a larger number of men by availing themselves of th benefits of the system, have thus voluntarily deposited a guarant against the crime of desertion. The act of March 3, 1883, which a lowed interest on the minimum deposit (five dollars), as recommend in my last report, promises to be productive of good results, as rece returns show a material increase in the number of deposits. At th close of the last fiscal year there was $1,046,468.51 to the credit of th account. This amount has been increased to $1,090,434.85 at the clo of the present year. There has been paid for interest on repaymen during the year $26,123.60, a trifle less than 2½ per cent. per annum c the balance carried.

The pressing needs of legislation on the subject of paymasters' bon impel me to again invite your attention to the matter. Officers expe ience difficulty in obtaining the required sureties owing to the constru tion placed by the accounting officers of the Treasury on the laws no in force relating to bonds of paymasters. They hold that each bo is a continuing bond from date of its approval, so long as the officer in service under his current commission, notwithstanding the fact th a new bond is exacted every four years or oftener if the interests of th service demand it. The liability of a surety should have some defini limit. While persons may be perfectly willing to assume responsibil ties which extend through a comparatively brief period, they hesitate t enter into such as may extend through a long indefinite term, and fro which they can obtain no release. The legislation which has been e acted to remedy this evil in the matter of bonds of collectors of inte nal revenue (20 Stats., p. 327), and of postmasters (Rev. Stats., 3827 should be extended to paymasters.

Attention is invited to the accompanying report of Maj. A. B. Care paymaster, United States Army, in charge of the settlement of clain of colored soldiers and sailors, which is very satisfactory. The add tional expense of placing the money in the hands of these claimants a required by law, has been exceedingly small.

I am, sir, very respectfully, your obedient servant,

WM. B. ROCHESTER,

Paymaster-General, United States Army.

The Hon. the SECRETARY OF WAR.

REPORT OF PUBLICATION OF WAR RECORDS.

WAR DEPARTMENT, WAR RECORDS OFFICE,
Washington, D. C., October 13, 1883.

SIR: I have the honor to report progress in the publication of the Military Records of the War of the Rebellion since October 23, 1882.

The general examination of the records, both Union and Confederate, has been completed. Any further examination that may be necessary will be for such missing links as may be developed in the compilation. The formal reports of military operations made by the Union commanders have all been copied, and those made by the Confederate commanders will be copied by the end of the next fiscal year. In consequence of the progress thus indicated the force of copyists has been reduced from eighteen to ten, and a further reduction is contemplated in the estimates for the coming year.

The total cost of printing and binding the volumes issued up to October 1, 1883, has been $74,069.01.

The expenditures on account of printing, binding, &c., since the date of my last report, are as follows:

For composition, stereotyping, &c., of volumes still in the hands of the printer—

Volume XII, Part III	$2,059 91
Volume XIII	1,889 71
Volume XIV	2,207 91
Volume XV	2,251 62
Volume XVI, Part I	1,526 08

To complete—

Volume VI	6,918 44
Volume VII	7,712 52
Volume VIII	6,472 66
Volume IX	6,034 71
Total	37,073 56

RECAPITULATION.

Balance available as per last report	48,511 30
Appropriation for fiscal year ending June 30, 1884	36,300 00
Total	84,811 30
Expenditures	37,073 56
Available October 1, 1883	47,737 74

The expenditures for salaries and incidental expenses during the fiscal year ending June 30, 1883, have been as follows:

Salaries	$41,049 82
Rent	1,200 00
Traveling expenses and express transportation	142 74
Fuel and lights	588 96
Stationery, books, maps, pamphlets, &c	1,569 31
Office furniture, carpets, &c	762 82
Repairs of—	
Office furniture	393 20
Heating apparatus	244 75
Telephone service	179 97
Incidental labor	191 23
Ice	82 20
Printing material	398 34
Total	46,803 34

Four volumes of Series I (VI–IX) have been issued; the index to Pa I, Volume X, has been completed; the text of Volumes XII–XV h been stereotyped, and the stereotyping of Part I, Volume XVI, is nea completed; Part II of that volume is now in the hands of the Pub Printer, and the manuscript of Volumes XVII–XXI is ready for hi Moreover, the arrangement of Volumes XXII–XXXII has been det mined. The latter volume will close the military operations of 1863.

The military records known as the "Hood papers" have been plac for publication at the disposition of the Government, and importa contributions have been made through the War Department agency f the collection of Confederate records. These contributions embrace confidential letter-book kept by General Robert E. Lee in 1863–'6 documents received from the legal representatives of Generals Hi man, Grimes, and Stuart, and those received from Generals Capp Early, Gibson, Pike, and Ruggles, and from Maj. H. B. McClellan, Ca T. A. Faries, and others.

Very respectfully, your obedient servant,

ROBERT N. SCOTT,
Brevet Lieutenant-Colonel, U. S. Army, in Charge.

To the SECRETARY OF WAR.

REPORT OF THE BOARD OF COMMISSIONERS OF THE SOLDIERS' HOME.

WASHINGTON, D. C., *October* 26, 1883.

SIR: Section 1 of the act of Congress, approved March 3, 1883, pr scribing regulations for the Soldiers' Home, directs that the Board Commissioners of the Home "shall every year report in writing to t Secretary of War, giving a full statement of all receipts and disburs ments of money, of the manner in which the funds are invested, of a changes in the investments and the reasons therefor, of all admissio and discharges, and generally of all facts that may be necessary to full understanding of the condition and management of the Home." obedience thereto I have the honor to submit the following, which h been adopted by the commissioners as their report for the year endi September 30, 1883:

The Board of Commissioners of the Soldiers' Home, as constitut under the laws in force prior to March 3, 1883, consisted of the Commi sary-General of Subsistence, the Adjutant-General, and the Surgeo General of the Army. By the act of Congress above mentioned a ne Board was constituted, to consist of the General-in-Chief commandi the Army, the Surgeon-General, the Commissary-General, the Adjutan General, the Quartermaster-General, the Judge-Advocate-General, a the Governor of the Home.

March 24, 1883, the new Board of Commissioners met at the Hom and organized, and since that date have met regularly as required l law. During the entire year there have been twelve regular and seve teen special meetings.

One of the first duties devolving upon the new Board was the pre aration and adoption of a new set of regulations for the government the Home, which the law just enacted made necessary. This duty w completed April 9, 1883, and the regulations having received the a proval of the Secretary of War April 17, 1883, were immediately pu

lished, together with the laws relating to the Home. A copy is submitted herewith, and is made a part of this report.

The recent legislation affecting the Home has, in a great degree, removed the embarrassments existing in late years through the failure of the accounting officers of the Treasury, on account of insufficient clerical force, to make the settlements from which the revenues of the Home are derived rapidly enough to supply the funds required for current expenses. An appropriation of $10,000, made in the Act of March 3, 1883, to pay additional clerical force, has enabled the Secretary of the Treasury to advance the work sufficiently to provide the money required, and to increase in a small amount the interest-bearing fund of the Home. But it is manifest that it will be for the interests of the Home if the settlements in its favor can be brought up more rapidly. Careful estimates have been made of the amounts which will be found due the Home when settlements for the years past shall have been completed, and there seems to be no doubt but that they will be found to aggregate at least one million five hundred thousand dollars. Of this sum the greater part is long past due, and the principal ought now to be on deposit and bearing interest in the manner provided by section 8 of the act of March 3, 1883.

The bonds and stocks held by the Home as investments have not been changed during the past year, and no purchases or sales of real estate have been made within the same period.

By an act of Congress approved December 23, 1882, the commissioners were authorized to sell a tract of land near Harrodsburg, Ky., containing about 200 acres, formerly the site of a branch Home. Proper arrangements were made in accordance with the law for the sale of the land, and it was offered at public sale on a day fixed by previous notice, but the minimum price fixed by the commissioners was not reached by the bidders, and it was withdrawn. The buildings upon the property were destroyed by fire several years ago, and the land is rented for grazing purposes, and yields a revenue of about $600 per annum, and makes it a better investment than could have been made with the money if it had been sold for the minimum price placed upon it.

April 17, 1883, I had the honor to submit to you the request of the commissioners that you would purchase, for the sum of $15,000, a small piece or parcel of land containing about 16 acres, belonging to the Home grounds in this District, but separated from the main domain by a public road, for the purposes of a soldiers' cemetery, to which a portion of it is now devoted. The commissioners at the same time, by a resolution unanimously adopted, dedicated the land to the use of the cemetery, to be transferred, with your approval, to the custody of the Quartermaster-General for care and embellishment, reserving the right to inter therein deceased inmates of the Home or any deceased officer or soldier entitled by law to burial in a national cemetery. The extending of the cemetery proper is becoming a necessity, and the use of the ground as such will be permanent. The commissioners therefore renew their recommendations in the premises so far as to ask that you will submit the question by special request to Congress for the appropriation necessary and authority for the transfer of the land.

The facilities for the care and treatment of inmates of the Home suffering from disability do not include cases of insanity, and such cases are placed in the Government Hospital for the Insane in this District at the expense of the Home, except those entitled under section 4843 Revised Statutes, whose insanity is developed within three years after discharge from the Army. The commissioners believe that if the atten-

tion of Congress shall be called to the propriety of admitting, with expense to the Home, all persons who become insane while inmates the Home, that it would be authorized. They therefore request th you will recommend to Congress that the Soldiers' Home in the Distr of Columbia be placed upon the same footing, with respect to the s mission of patients to the Government Hospital for the Insane, as t National Home for Disabled Volunteers, from which all cases are ceived at the hospital and treated without charge, under the act approv August 7, 1882, making appropriations for the sundry civil expenses the Government.

The property of the Home has been kept in as good repair as possil with the limited means which could be devoted to the purpose. So loss has been incurred by fire. March 1, 1883, a large shed, with abo 90 tons of hay, from the storage of the previous summer, was burn and on the night of July 4, 1883, the dairy barn and stables, with abo 80 tons of hay, which had just been put in, were burned. Proper vestigations were made, under the orders of the governor of the Hon without arriving at the origin of the fires. Advertisement was ma offering a reward of $100 for information which would lead to the app hension and conviction of a supposed incendiary. This led to the d covery that the barn had been set on fire by a former inmate of t Home, who confessed his act, and is now in jail awaiting the action the grand jury. The barn is being rebuilt, and will cost about $4,0

The library building, which was erected in 1877–'78, but not complet as originally designed, is now being completed by the construction o veranda around the main portion, the cost of which will be about $1,9

The number of men admitted to the Home during the year is 1 which is above the yearly average for the past ten years, and grea than any year, except 1877, 1878, and 1881, in the history of the Hom

The reports of the governor, the treasurer, and the attending s geon of the Home, submitted herewith, give in detail the matters p taining to the internal administration which it is unnecessary to rep here. In the report of the governor, however, reference is made statements contained in his last annual report, which was not pu lished. In order to make complete the information designed to given, the following is quoted from that report:

It will be observed that the number of inmates is steadily increasing. An exa nation of the records shows that the increase has been going on from year to year, s this increase would seem to demand an enlargement of the means of accommodati No ill effects that I am aware of have resulted thus far from the crowded condit of the dormitories, but they are occupied to their full capacity, and any further cro ing should be avoided if possible. The dining room is of capacity to seat only 3 whilst the whole number present is 471 (including those in hospital), so that i necessary to prepare several second tables for each meal, which adds much to labor of the attendants as well as to the inconveniences of those to be served. extension of the dining room appears to have been projected several years ago, as dicated by the finished foundation and large amount of material on the ground. this extension could be completed, and in such manner as to admit of sleeping apa ments in the upper story, it would be a desirable improvement, would relieve pressure now felt for more room, and, in my judgment, would be largely conducive the comfort and health of the inmates.

INTERNAL POLICE AND DISCIPLINE.

Each floor, in both the main building and the annex, is in charge of a serge whose duty it is to maintain order and see that the rooms are kept in a neat a orderly condition, look after the fire-hose on his floor, so that it may be at all times re for use, and see that the gas is economically burned and promptly extinguished wh no longer required. In the performance of these duties as little restraint is pla

upon the inmates as possible, the object being to allow them the utmost freedom of action consistent with the comfort of all. The messing arrangement, the cooking and the character and quantity of the food are all that could possibly be desired, and the provisions are so varied that every meal served is essentially different from that (of the same kind) which preceded it. The sleeping arrangements also are admirable, each inmate having a bed to himself, consisting of an iron bedstead, wire mattress, upon which is a hair mattress, a pair of clean linen sheets, a hair pillow with linen case, and an ample supply of excellent woolen blankets. Each room is provided with a small box containing shoe-brushes and blacking, a table with water pitcher and tumblers, and each occupant is provided with a neat box or trunk, which stands by his bed, and in which his clothes are always neatly packed. So far, indeed, as concerns the physical comfort of the inmates, their eating and their lodging, it would be very difficult to suggest anything by way of improvement. * * *

h.

DIVINE SERVICE.

Divine service is held three times every Sunday; Catholic service in the morning, Protestant service in the afternoon and evening; all of which, but particularly the Catholic service, are well attended by as orderly, devout, and well conducted congregations as can be found in any community.

It is with regret that the commissioners record the death of two officers immediately connected with the Home since the date of the last annual report.

Maj. Milton Cogswell, brevet colonel, United States Army (retired), deputy governor of the Home, died November 20, 1882.

Brig. Gen. Charles H. Crane, Surgeon-General, United States Army, one of the Commissioners of the Home, died October 10, 1883.

These officers, in their respective positions, were devoted to the interests of the institution, and besides giving it such attention as is required for a strict discharge of duty imposed by law and orders, were at all times prompted by a natural kindness of disposition, which was possessed by both officers in more than usual degree, to seek out methods for improving the Home and increasing the comfort and happiness of the inmates.

No changes have occurred during the year in the roster of the officers of the Home except in the position of deputy governor; and those now on duty are—

Col. Samuel D. Sturgis, Seventh Cavalry (brevet major-general), governor; Lieut. Col. Anderson D. Nelson, brevet colonel, United States Army (retired), deputy governor, assigned to duty April 4, 1883, in place of Colonel Cogswell, deceased; Capt. Benjamin F. Rittenhouse, brevet major, United States Army (retired), secretary and treasurer. Capt. Calvin De Witt, assistant surgeon, United States Army, attending surgeon.

The papers accompanying this report are—

1st. A copy of the laws and regulations for the Soldiers' Home, 1883.
2d. The annual report of the governor of the Home.
3d. The annual report of the attending surgeon of the Home.
4th. The treasurer's statement of receipts and disbursements of funds.
5th. A list of names, &c., of men admitted to the Home.

I am, sir, very respectfully, your obedient servant,

W. T. SHERMAN, *General*,
President Board of Commissioners.

The Hon. SECRETARY OF WAR.

REPORT OF THE BOARD OF VISITORS OF THE MILITAJ ACADEMY.

WEST POINT, *June*, 1883

SIR: The Board of Visitors appointed to attend the annual exami tions of the Military Academy at West Point have attended to th duty, and submit the following report:

All the members of the Board were present with the exception Senator Cameron, of Wisconsin, and the Board organized by the el tion of Rear-Admiral C. R. P. Rodgers as president of the Board, a of Col. L. M. Dayton as secretary.

At the first meeting of the Board the following committees were pointed, viz:

* * * * * * *

These several committees immediately proceeded to the work signed them, making a careful examination of all the departments the Academy, the results of which were reported to the full Board its action.

It is proper to add that the conclusions of the Board now to be p sented are based not alone upon the reports of these committees, l upon the personal inspection of each individual member of the Bo so far as that was practicable in the time allotted to the work.

We desire to express our high appreciation of the uniform courte shown to us by the Superintendent, General Merritt, and by all the c cers and professors of the Academy. Every possible facility was f nished by them to enable the Board to make a thorough investigatio all matters connected with the administration of the Academy dow the minutest detail. To General Merritt we are especially indebted valuable suggestions made by him to the Board at its request.

DISCIPLINE AND DRILL.

The state of discipline is most excellent, and is characterized by gr fairness and absolute impartiality. The fine military bearing of t cadets, their superb physical development and cheerful faces, sh that the system pursued is wise and not unnecessarily severe. T precision with which the evolutions and movements were made by t corps of cadets in artillery, cavalry, and infantry gave evidence of m thorough training. And the same is true of the target practice w the large guns and mortars. The exercises, too, in ponton and sp bridge building indicated great proficiency in that branch.

INSTRUCTION.

In the various departments constituting the academic course t cadets showed a degree of intelligence and efficiency reflecting the hi est credit upon their instructors, as well as upon themselves. So thing more than a familiar knowledge of text books is required. T cadet must understand the principles of the subject in hand. Howe correct the result at which he arrives may be, he is not suffered to without giving the reason.

So far as we can judge the results of the course of instruction a training at the Academy are in the highest degree satisfactory.

A graduate of West Point is, almost of necessity, a gentleman in t best sense of the word—a man of intelligence, integrity and truth—t very best material for a brave and efficient soldier and a useful citiz

A system of instruction producing these results is entitled to the support of the Government and the respect of the people.

The great wonder is that in the short period of four years such a wide field of study can be covered, and at the same time the work can be done so well. Nothing but the utmost fidelity on the part of the officers and professors in steadily upholding and enforcing the requirements of the course can account for it.

POLICE ADMINISTRATION, INCLUDING BUILDINGS AND GROUNDS.

A careful inspection of the buildings showed the necessity of some general repairs to the cavalry stable, which, in the opinion of the Superintendent, can be made out of the general appropriation under that head. It would be easy to suggest other changes and alterations for which no specific appropriations have been made, and which would materially add to the convenience of the buildings and be of permanent benefit to the Academy.

We confine ourselves, however, to recommending such improvements only as we deem absolutely essential to the efficiency of the Institution and the comfort and well-being of those for whose education and training it is maintained.

There is pressing and immediate necessity for new floors in the cadet barracks and in the academic building, at an estimated cost of $5,000.

The present bathing accommodations for the cadets are insufficient and wholly inadequate to the requirements of cleanliness and good health. Only thirteen bath-tubs are now provided, and these need thorough repair. This limited number makes it necessary for many of the cadets to bathe at unseasonable hours, and should be increased to at least fifty in number, which can be done at an expense of not exceeding $3,000.

The sum of $5,000 is necessary for the completion of the new hospital building and for grading the grounds around it.

It is important that the main pipe for the supply of water should be extended from its present terminus to the cadet barracks, which will cost $3,000.

There are several old and dilapidated wooden buildings located near the artillery and cavalry barracks and used for work-shops and store-houses. They are in the last stages of decay and crowded closely together, and are wholly unsuited to the uses to which they are put. Should a fire break out among them (an event very likely to happen) it would cause the loss of much valuable property stored in them and greatly endanger the safety of neighboring buildings. We recommend their removal, and the erection of a suitable building or buildings of substantial materials in their place. The cost of this will be $6,000.

The foregoing estimates were furnished to the Board by the Superintendent, and may be relied upon as approximately correct.

GYMNASIUM.

During the past two years regular instruction has been given in gymnastic exercises, the results of which have been most satisfactory.

There is but one opinion on the part of the Board as to the importance of continuing this branch of instruction, and of making it more efficient by providing adequate accommodations for its development. The room now used for that purpose in the academic building falls far short of the requirements of a modern gymnasium, and is utterly unsuited for the purpose to which it is applied.

In the opinion of the Board a plain and substantial building should be erected and furnished with such apparatus as may be needed for

thorough physical training. No estimate has been made of the cost of such a structure, and our purpose is accomplished by calling attention to its necessity.

FISCAL AFFAIRS.

A careful investigation was made into the manner of conducting the financial affairs of the Institution, the result of which was in all respects satisfactory. The books are carefully and methodically kept, and the whole system is conducted upon sound business principles.

The duties of the quartermaster and commissary of cadets are now well discharged, and the cadets are furnished at all times with suitable, well prepared, and abundant food.

Very great credit is due to the officers in charge of this department.

In conclusion, it gives the Board great pleasure to report that in all the departments of the Academy they have found nothing to censure, but everything to commend. It has been especially impressed with the high moral tone, the military style, and soldierly bearing both of the officers and cadets of the Academy.

Very respectfully submitted.

C. R. P. RODGERS,
President of the Board.
L. M. DAYTON,
Secretary of the Board.
ISAAC N. ARNOLD.
J. SCHUYLER CROSBY.
B. C. WHITMAN.
HOWARD POTTER.
ASA FRENCH.
GEO. W. STEELE.
AMOS TOWNSEND.
W. A. J. SPARKS.

Hon. ROBERT T. LINCOLN,
Secretary of War.

REPORT ON CONSTRUCTION OF BUILDING FOR STATE, WAR, AND NAVY DEPARTMENTS, 1883.

OFFICE OF BUILDING FOR
STATE, WAR, AND NAVY DEPARTMENTS,
Washington, D. C., July 2, 1883.

SIR: I have the honor to transmit the following report of operations on the building for State, War, and Navy Departments for the fiscal year ending June 30, 1883.

During the year the north wing of the building was finished and occupied by the War Department, and work was commenced on the approaches of the north front.

The preparation of drawings and of cut granite for the west and center wings was also commenced and well advanced.

NORTH WING.

The work remaining unfinished on this wing at the close of the last fiscal year chiefly consisted of the flooring, tiling, passenger elevator, main-stair railings, parquetry flooring, fresco painting, chandeliers, mantels and grates, hanging of doors, painting, and the area elevator for

the court-yard. Contracts were in force for all the materials required excepting the fresco painting and parquetry flooring of rooms intended for the special use of the Secretary of War.

The remaining cast-iron door-frames, washboards, and stair-strings were finished in July, the board flooring of office rooms in August, and the marble tiling of corridors on October 23.

Ten rooms were painted in decorative designs and two received parquetry floors. The remainder of the office rooms, sixty-nine in all, as well as the corridors and domes, were left with white walls and ceilings.

The passenger elevator, an unusually powerful, rapid, and complete apparatus, fully provided with the most approved safety appliances and constructed in a most thorough manner, was completed on April 3.

All chandeliers and other gas-fixtures were hung in August and September, the area elevator was put into running order in October, and all the mahogany doors were hung early in December.

Owing to some delays in the contract work the building was not made entirely ready for occupancy until December 23, 1882, on which day the working force was discharged, leaving only the passenger elevator unfinished. The upper stories were, however, completed some months earlier, and on September 15, 1882, the Adjutant-General was given possession of seventeen rooms in the fourth and attic stories. Only seven of these rooms were immediately occupied, the remainder standing vacant until the War Department took possession of the entire wing and commenced moving into it, on February 5, 1883. On the 20th of November previous, the large room in the basement of the center pavilion was occupied by the Department for storage of books.

* * * * * * *

APPROACHES OF NORTH WING.

The appropriation for the approaches to this wing having been made in August, 1882, contracts were signed in September, 1882, after due advertisement, for all the cut granite, bluestone flagging, and tiles required for the approaches and street sidewalks on the north front. The first cargo of granite arrived on May 1, and of bluestone on May 14, 1883.

On March 26, excavation for the approaches was commenced by the contractor and completed on May 25. The laying of foundations of walls was then commenced. These have since been completed and the building of walls begun. The work is proceeding as rapidly as the delivery of materials by the contractors will permit.

At this date the entire east retaining wall has been built, excepting five stones and one post. The ashlar and coping of the easterly wall on Pennsylvania avenue have been built, and most of the dry stone backing laid up for the two westerly retaining walls. The water pipe and about one-half of the drain pipe have also been laid.

WEST AND CENTER WINGS.

The first appropriation, amounting to $350,000, for the construction of these wings, was made by act approved August 7, 1882. Under it orders for cut granite amounting to nearly $321,000 were executed according to the terms of the existing general contracts on the 7th of November, 1882, and since that time the preparation of the stone has

been going on. Nearly all of the granite for the first-story front of the west wing has already been delivered. Less progress has been made by the contractor on the granite for the sub-basement, basement, and area walls, but the first cargo of it has arrived within the last week.

Meantime considerable progress has been made in the office upon the working drawings of these wings, including the stone-work, heating and ventilating apparatus, the design of the War Department library, and the general plans of floors.

A second appropriation to the extent of $500,000 was made by act approved March 3, 1883, for these wings, of which the sum of $210,000, has been applied to the preparation of cut granite for the second and third stories of the west front, for which an order under the existing contract was executed on June 25, 1883. It is expected that a similar order will be executed shortly under this appropriation for the last of the granite required for the basement, front steps, and court-yard walls of the building.

Following is a tabular statement of the contracts in force and entered into during the year:

Date of contract.	Subject of contract.	Name of contractor.	Amount of contract.	Present condition.
1881.				
May 10	Cast-iron door and window finish and wash-boards.	Joseph Hall & Co	$47,836, for doors and windows, 65 cents to $1.50 per foot for wash-board.	Completed.
Sept. 1	Sand	John B. Lord	90 cents per cubic yd.	In force.
Oct. 27	Lime	Wm. Cammack	$1,220.50	Completed.
Nov. 5	Bronze balusters and newel posts.	E. Henry & Bonnard	$6,011	Do.
26	Plastering and stucco work.	Ezekiel Smith	$15,760.97	Do.
1882.				
Feb. 23	Mahogany and pine doors	A. H. Andrews & Co	$8,159	Do.
Mar. 13	Bronze hardware	Hopkins and Dickinson Manufacturing Company.	$3,119.10	Do.
13	Hydraulic elevator	Otis Bros. & Co	$15,500	Do.
24	Marble tiles, border, and door slabs.	Vermont Marble Company.	$6,658.07	Do.
Apr. 26	Picture rods and fittings	Joseph Nowmann	$1,096.20	Do.
26	Gas fixtures	Mitchell, Vance & Co	$1,401.25	Do.
May 10	Marble mantels	Adolph Klaber	$1,568	Do.
10	do	A. L. Fauchere & Co	$2,012	Do.
10	do	Chas. E. Hall & Co	$4,320	Do.
25	Gas chandeliers	Cornelius & Co	$6,079	Do.
June 8	Elevator fronts	Manly & Cooper Manufacturing Company.	$1,450	Do.
24	Area elevator	Geo. C. Howard	$700	Do.
	CONTRACTS ENTERED INTO DURING THE YEAR.			
1882.				
July 5	Parquetry floors	Groocock & Co	$1,560	Do.
15	Decorative painting	C. Otto Ficht	$2,000	Do.
31	Grates and fire-place trimmings.	Wm. H. Jackson & Co	$1,289	Do.
Sept. 2	Cut granite	Albert Ordway	Not to exceed $150,000.	In force.
25	do	Davis Tillson	$59,648.17	Do.
25	Bluestone flagging	Acker & Co	$12,164.56, estimated.	Do.
Oct. 19	Cut granite	Bodwell Granite Company.	$1,533.49	Completed.
Nov. 7	do	Bodwell Granite Company.	Not to exceed $165,000.	In force.
1883.				
Mar. 9	Excavation	Wm. H. Adams	$2,349	Completed.
20	Pebbles	John B. Lord	$1.60 per cubic yard	In force.
20	Cement	Jas. H. McGill	$4.09 per barrel	Do.
May 9	Cut granite	Ellsworth & E. Bluehill Granite Company.	$1 per cubic foot	Do.
June 25	do	Albert Ordway	Not to exceed $210,000.	Do.

OTHER OPERATIONS.

By act of Congress approved August 5, 1882, it was required "that the partition wall separating the corridors of the first, second, third, and fourth stories of the east wing from the said stories of the south wing * * * shall be removed, so as to afford easy access from one wing to the other." The walls were accordingly removed, and the openings thus made finished off in August and September, 1882; and in November wire screens and doors were put up in the corridors on the dividing lines between the State and the other Departments.

In February, 1883, the brick partition in the basement corridor between the east and south wings was removed, and the opening finished uniformly with the corridors.

With a view of clearing the field for the coming operations on the west and center wings, as well as to make permanent provision for the numerous telegraph, telephone, and other electric wires needed by the three Departments occupying the building, several small telegraph poles and many air-strung wires were removed, and in their stead one stout pole was erected on the northwest corner of Seventeenth and G streets, from which an 8-inch cast-iron pipe-conduit was laid under ground directly across Seventeenth street to the west end of the north wing. A cable of twenty wires was carried down this pole and through the conduit to the sub-basement of the building, where it was connected to a main system of wires, which was run along the ceiling of the sub-basement and connected to the several Department telegraph offices, telephones, &c. This work was done in March and April, 1883.

PROBABLE OPERATIONS FOR FISCAL YEAR 1883–'84.

It is expected that the approaches of the north wing will be entirely completed, including the adjacent sidewalks, during the fall of the present year, 1883.

For the west and center wings it is expected that the site will be cleared in March by the demolition and removal of the old building of the Navy Department, that the excavations for foundations will be completed in the spring of 1884, and that before the close of the fiscal year the concrete foundations will be laid and the masonry of the court-yard coal vaults and area walls well under way. By that time all the cut granite for the area walls, sub-basement, and the lower half of the basement walls, and of the first and second stories of the front walls, will probably be delivered on the ground. No interruptions may therefore occur in the masonry work for want of stone, as has frequently been the case heretofore from deficiency of funds to procure it in good season.

STATEMENT OF FUNDS.

Total amount expended to July 1, 1883:	
On north wing	$1,816,190 94
On west and center wings	153,133 13
Balance of appropriation on hand July 1, 1883	852,666 53
New appropriation required to continue the construction of the west and center wings for the fiscal year ending June 30, 1885	500,000 00

THOS. LINCOLN CASEY,
Lieutenant-Colonel, Corps of Engineers,
United States Army, in charge.

Hon. ROBERT T. LINCOLN,
Secretary of War.

REPORT OF THE CHIEF OF ENGINEERS.

OFFICE OF THE CHIEF OF ENGINEERS,
UNITED STATES ARMY,
Washington, D. C., October 13, 1883.

SIR: I have the honor to present for your information the following report upon the duties and operations of the Engineer Department for the fiscal year ending June 30, 1883:

OFFICERS OF THE CORPS OF ENGINEERS.

The number of officers holding commissions in the Corps of Engineers, United States Army, at the end of the fiscal year was 103 on the active list and 9 on the retired list, the latter, however, under the law of January 21, 1870, not being available for duty.

Since the last annual report the Corps has lost, by death, resignation, and retirement, seven of its officers: Lieut. Col. Gouverneur K. Warren, who died at Newport, R. I., August 8, 1882; Maj. Franklin Harwood, who died at Boston, Mass., March 26, 1883; Maj. James W. Cuyler, who died at Philadelphia, Pa., April 16, 1883; Capt. Benjamin D. Greene, who resigned to date December 31, 1882; Second Lieut. Edward O. Brown, who resigned to date July 1, 1882; and Col. Z. B. Tower, who was retired January 10, 1883, and Col. George Thom, who was retired February 20, 1883, under provisions of section 1 of the act of Congress approved June 30, 1882.

There have been added to the Corps, by transfer to date July 1, 1882, two second lieutenants, one each from the Fifth Artillery and Fourth Cavalry, and by promotion of graduates of the Military Academy three second lieutenants. The commissions of the latter date from June 13, 1883, but they did not become available for duty until after the close of the fiscal year, and are therefore not included in the strength of the Corps.

On the 30th of June, 1883, the officers were distributed as follows:

Office Chief of Engineers, including the Chief	4
Fortifications and river and harbor works	17
Fortifications, river and harbor works, and The Mississippi River Commission	1
Fortifications, river and harbor works, and Board of Engineers	2
Fortifications, river and harbor works, and Yorktown Monument	1
Fortifications, river and harbor works, and light-house duty	2
Fortifications, light-house duty, and examinations at South Pass	1
Fortifications, Board of Engineers, Battalion of Engineers, and Joint Gun Foundry Board	1
River and harbor works	23
River and harbor works and Board of Engineers	1
River and harbor works, Mississippi River Commission, and light-house duty	1
River and harbor works, and improvement of Hot Springs Creek under direction of the Secretary of the Interior	1
River and harbor works and light-house duty	1
Board of Engineers and The Mississippi River Commission	1
Construction of building for State, War, and Navy Departments, Washington National Monument, improvements over grave of Thomas Jefferson, and monument at Newburg, N. Y	1
Washington Aqueduct and Government of the District of Columbia	2
Battalion of Engineers	14
Leave of absence	4
Detached, on duty with the General of the Army, generals commanding divisions and departments, Light-House Establishment, Military Academy, Board of Commissioners of District of Columbia, The Mississippi River Commission, under State Department on boundary line between United States and Mexico, and with Fourth Cavalry	25
	103

The officers detached were on duty as follows:

Col. William F. Raynolds, engineer fourth light-house district	1
Col. James C. Duane, engineer third light-house district	1
Lieut. Col. Orlando M. Poe, on staff of the General of the Army	1
Maj. Orville E. Babcock, engineer fifth and sixth light-house districts	1
Maj. David P. Heap, engineer secretary to Light-House Board	1
Maj. William A. Jones, on staff of Major-General Commanding Division of the Pacific	1
Capt. William R. Livermore, on staff of Commanding General, Department of Texas	1
Capt. William S. Stanton and Lieut. William M. Black, on duty with Company E, Battalion of Engineers, and at Military Academy	2
Capt. James F. Gregory, on staff of Lieutenant-General commanding Division of the Missouri	1
Capt. Charles E. L. B. Davis, engineer tenth and eleventh light-house districts	1
Capt. Clinton B. Sears, executive officer of The Mississippi River Commission, and secretary and assistant to committee on construction	1
Capt. Albert H. Payson, engineer twelfth light-house district	1
Capt. Francis V. Greene, assistant to Engineer Commissioner, District of Columbia	1
Lieuts. Eric Bergland, Willard Young, and Solomon W. Roessler, on duty at the Military Academy	3
Lieut. Henry S. Taber, on staff of Commanding General, Department of Dakota	1
Lieut. Thomas W. Symons, on duty under Department of State in connection with boundary line between the United States and Mexico	1
Lieut. Smith S. Leach, secretary and disbursing officer of The Mississippi River Commission	1
Lieut. Dan C. Kingman, on staff of Commanding General, Department of the Platte	1
Lieut. Gustav J. Fiebeger, on staff of Commanding General, Department of Arizona	1
Lieut. Oberlin M. Carter, on staff of Commanding General, Department of the Missouri	1
Lieut. George W. Goethals, on staff of Commanding General, Department of the Columbia	1
Lieut. Eugene J. Spencer, on duty with Fourth Cavalry	1
	25

SEA-COAST AND LAKE-FRONTIER DEFENSES.

During the year operations have been restricted to those necessary for the preservatiom and repair of the existing works.

No appropriations for new works nor for the modification of existing ones have been made during the past eight years, and to-day the permanent fortifications of the country are in the incomplete condition in which they were left when operations were suspended in 1876, and are rapidly deteriorating for lack of funds to complete them.

This subject has been so fully discussed in former reports, especially those for the years 1880 and 1881, that it seems quite unnecessary to do more now than to refer to them; and the more so as the views of the Board of Engineers for Fortifications given on page 51 and following, so fully cover the entire matter of our defensive system. To those views, and to the annual reports from this office above alluded to, I beg most earnestly to invite your attention and that of Congress, in the hope that their careful consideration may secure the means, by liberal appropriations, for that improvement of our defensive system which is so imperatively demanded by the vast interests it is designed to protect.

* * * * * * *

RIVER AND HARBOR IMPROVEMENTS.

The funds with which the works for the improvement of rivers and harbors were prosecuted during the past fiscal year were derived from the appropriations of the act of August 2, 1882, together with such balances as were on hand from previous appropriations.

A brief statement is given below, setting forth the condition of each

improvement, the extent of the work performed during the year, the amount of money expended, and an estimate of the probable cost of completion, together with an estimate of the amount that can be profitably expended during the year ending June 30, 1885.

The reports of the officers in charge of the various improvements will be found in the Appendix, and to these reports special reference should be made whenever detailed information is desired concerning the progress and condition of each work.

The examinations and surveys at localities required and provided for in the river and harbor act of August 2, 1882, were distributed and assigned to the officers in charge of the several river and harbor districts.

The act provides that no survey shall be made of any of the harbors or rivers therein enumerated until the Chief of Engineers shall have directed a preliminary examination of the same by the local engineer in charge of the district, and then only when said local engineer shall have made such examination, and shall have reported to the Chief of Engineers that, in his judgment, said harbor or river is worthy of improvement and the work is a public necessity.

These required preliminary examinations were completed during the fiscal year. Their results, together with the action of the Chief of Engineers in each case, will be made the subject of a separate communication.

An allotment has been made of the funds required for such surveys as have been found to come within the provision of the above act, and as far as the amount appropriated applicable thereto would admit.

These surveys are in progress, and the reports thereon will be submitted from time to time during the ensuing session of Congress as far as received.

* * * * * * *

OFFICE OF THE CHIEF OF ENGINEERS.

In the labors of the office the Chief of Engineers was assisted on the 30th of June by the following officers in charge of the several divisions:

Major John M. Wilson, Bvt. Colonel, U. S. A.—

FIRST DIVISION.—*Fortifications and Surveys relating thereto—Armament of Fortifications—Sites for Engineer Defenses—Boards of Engineers for Defenses.*

SECOND DIVISION.—*Battalion of Engineers—Engineer School of Application, and Engineer Depot and Post—Professional Papers and Information—Personnel—Orders—Military Reservations—Land Files.*

Lieut. Col. John G. Parke, Bvt. Maj. Gen., U. S. A.—

THIRD DIVISION.—*Improvement of Rivers and Harbors and Surveys relating thereto—Bridging Navigable Waters of the United States—Public Buildings and Grounds and Washington Aqueduct.*

Captain Henry M. Adams.—

FOURTH DIVISION.—*Accounts for Disbursements—Returns of Engineer Property and Instruments—Applications for Remittances—Appropriations and Estimates—Blank Forms.*

FIFTH DIVISION.—*Survey of the Lakes—Explorations and Surveys—Reconnaissances—Maps—Instruments—Claims.*

Very respectfully, your obedient servant,

H. G. WRIGHT,
Chief of Engineers,
Brig. and Bvt. Major-General.

Hon. ROBERT T. LINCOLN,
Secretary of War.

REPORT OF THE CHIEF OF ORDNANCE.

WAR DEPARTMENT, ORDNANCE OFFICE,
Washington, October 1, 1883.

SIR: I have the honor to submit the following report of the principal operations of the Ordnance Department during the fiscal year ended June 30, 1883, with such remarks and recommendations as the interests of this branch of the military service seem to require.

The fiscal resources and expenditures of the Department during the year were as follows, viz:

Amount in the Treasury to the credit of the appropriations on June 30, 1882	$616,341 81
Amount in the Treasury not reported to the credit of the appropriations on June 30, 1882	7,891 69
Amount in Government depositories to the credit of disbursing officers and others on June 30, 1882	216,943 83
Amount of appropriations for the service of the fiscal year ended June 30, 1883	*1,930,087 56
Amount refunded to ordnance appropriations in settlement of accounts during the year ended June 30, 1883	15,010 26
Gross amount received during the fiscal year ended June 30, 1883, from sales to officers; from rents; from collections from troops on account of losses of, or damage to, ordnance stores; from Chicago, Rock Island and Pacific Railroad Company; from powder and projectiles (proceeds of sales); from sales of condemned stores; from testing machine, and from all other sources not before mentioned	130,087 42
Total	2,915,862 57

Amount of expenditures during the fiscal year ended June 30, 1883, including expenses attending sales of condemned stores, powder, and projectiles, &c	*1,808,669 33
Amount deposited in Treasury during the fiscal year ended June 30, 1883, as proceeds of sales of Government property	94,050 06
Amount transferred from ordnance appropriations in settlement of accounts during the fiscal year ended June 30, 1883	112 08
Amount turned into the surplus fund on June 30, 1883	148,948 61
Amount in Government depositories to the credit of disbursing officers and others on June 30, 1883	227,814 45
Amount in the Treasury not reported to the credit of appropriations on June 30, 1883	5,966 57
Amount in the Treasury to the credit of appropriations on June 30, 1883	629,701 47
Total	2,915,862 57

STATIONS AND DUTIES.

The stations and duties of the officers of the Ordnance Department are as follows: Four at the Ordnance Office; thirty-five at the arsenals, armory, agency, and powder depots; nine on the Ordnance Board and at the foundries; eight at the several military headquarters and ordnance depots; four at the Military Academy; one under the orders of the Secretary of the Interior; one in the Life-Saving Service, under the Secretary of the Treasury; and one on leave of absence, sick. Under the operation of existing laws two officers (Lieutenants Hobbs and Howard) have been transferred to the Department from the line of the Army, after passing a satisfactory examination.

The Ordnance Department provides the armament for our sea coast defenses, and arms and other ordnance stores for the Army, the militia,

*Including $7,500 appropriated by act of Congress approved March 11, 1882, for the erection of a monument to the memory of General James A. Garfield.

the Marine Corps, all other executive departments to protect public money and property, and the thirty colleges authorized by law to receive them for instruction. It has not only to provide these ordnance and ordnance stores of the very best quality and most perfect workmanship, to determine on the most effective material for war purposes, after careful study and trial, but to keep up with the important results of the inventive genius and mechanical execution of this progressive age.

A recent inspection of the armory and several of the most important arsenals satisfies me that the varied duties of the Ordnance Department are performed with great skill, economy, and efficiency, and that our ordnance officers are fully equal to any demand upon them requiring the highest professional attainments.

Some very valuable reports and papers by officers of the Department are submitted, most of which have been printed as Ordnance Notes and distributed to the Army. The frequent commendations received by our publications is the best proof of their value and influence, and of the wisdom of continuing the series and giving them a wide circulation.

SMALL-ARMS.

There were manufactured at the National Armory, Springfield, Mass., during the fiscal year ending June 30, 1883, 33,621 arms, including rifles, carbines, and shot-guns. A very large amount of work was also done in repairing, making spare parts, manufacturing swords and sabers, and miscellaneous supplies, and the Armory continues to hold its high reputation for the superior character of its work and products.

MAGAZINE-GUNS.

Three magazine guns were recommended by the Board in its report of September, 1882, consisting of the Lee, the Chaffee-Reece, and the Hotchkiss. By your authority, immediate steps were taken to provide as large a number of each for trial in the field as the appropriation would permit. The Hotchkiss gun is being made by the Winchester Arms Company, where arms on the same system are made for the trade. The Chaffee-Reece gun is now under process of manufacture at the National Armory. There being no private factory with suitable plant, the work could be more economically done by the Department. The Lee gun has not been contracted for, the parties interested laboring under financial difficulties. It is believed, however, that the guns will be forthcoming in time to be sent into the field with the other two early next spring. The trial of these guns, representing the systems of detachable and fixed magazines, will most assuredly be of great value in determining on the most suitable magazine arm for the military service.

SPRINGFIELD SHOT-GUNS.

A sufficient number of these arms have been completed, and the troops west of the Mississippi have been supplied with them—two to a company, with a supply of ammunition. These guns have been most acceptable to the soldier in the field. It is not known that any other army in the world on frontier service is so well supplied with special means of acquiring skill in the handling of arms while providing a variety of food by hunting.

MEDALS—REWARDS FOR TARGET PRACTICE.

The suitably inscribed gold and silver medals to be awarded to the successful marksmen in Army contests, as provided in General Orders 53, of 1882, and to become the absolute property of the winners, have been prepared at the Philadelphia mint. They were received in ample time to send them to the several headquarters in advance of the date of the contests. Medals may now be delivered immediately after the the successful marksmen have been named.

ARMAMENT OF FORTIFICATIONS.

During the last Congress, a select committee of five Senators, of which Senator John A. Logan was chairman, was appointed, "with instructions to take into consideration the subject of heavy ordnance and projectiles," &c.

After as careful a consideration of this very important subject as the time at its disposal would permit, the committee stated in brief the conclusions it had reached as to "the most judicious and economical method of meeting the heavy-ordnance question in the future," and made several recommendations, all of which were subsequently embodied in the act making appropriations for fortifications, &c., approved March 3, 1883, as follows:

For the armament of sea-coast fortifications, including heavy guns and howitzers for flank defense, carriages, projectiles, fuzes, powder, and implements, their trial and proof, and all necessary expenses incident thereto, including compensation of draughtsmen on gun construction while employed in Ordnance Bureau, and for conversion of 10-inch smooth-bore cannon into rifled guns, making and testing two 12-inch cast-iron rifled breech-loading cannon, in lieu of such of the guns the construction of which has not been commenced, as were provided for by the "act making appropriations for fortifications and other works of defense, and for the armament thereof, for the fiscal year ending June 30, 1881, and for other purposes," approved May 4, 1880, making and testing two breech-loading steel guns, one 8-inch and one 10-inch, making mortars and gun-carriages, mounting 15-inch guns, making and testing two guns banded or wrapped with wire, testing devices for breech-loading guns, testing projectiles, &c., in accordance with the report of the Select Committee of the Senate on the Subject of Heavy Ordnance and Projectiles, $400,000.

Under the specific provisions of this act contracts have been made:

1. For converting fifty 10-inch Rodman smooth-bore guns into 8-inch rifles, by lining with a coiled wrought-iron tube.

2. For making two 12-inch cast-iron breech-loading rifles, one of which is to be lined as far as the trunnions with a steel tube wrapped with wire.

3. For making one 12-inch cast-iron mortar, banded with steel hoops.

4. For making one 10-inch cast-iron breech-loading rifle, wrapped with steel wire, and one 12-inch cast-iron breech-loading rifle, tubed, and banded with steel hoops.

5. For the tubes, hoops, &c., for one 8 and one 10 inch steel rifle.

6. For testing the "devices for breech-loading guns" submitted by H. F. Mann and Col. Theo. Yates.

7. And twenty-five carriages for 15-inch smooth-bore guns have been ordered to be altered, to permit the use of increased powder charges.

In the purely experimental guns in the above list, with one exception, *steel* is used wholly or in part in the construction. Whether or not *gun steel*, in suitable masses and of the requisite quality, could be procured in this country had first to be considered. In order to put our wants fairly and squarely before our steel manufacturers, the following circu-

lar letter was freely distributed to more than twenty of the principal steel works in the United States:

ORDNANCE OFFICE, WAR DEPARTMENT,
Washington, April 3, 1883.

——————:

GENTLEMEN: I inclose herewith drawings giving the dimensions and weights for certain steel forgings, to wit, the tube, jacket, and trunnion-hoop for an 8-inch breech-loading rifle, and the trunnion-hoop for a 12-inch muzzle-loading rifled mortar, the construction of which is provided for by the act of 1883 for the armament of fortifications, and request that you will inform this office whether you possess the facilities for manufacturing the same, of the qualities specified below.

Open hearth or Siemens-Martin steel is required. The ingots for the tube and jacket should weigh two and one-half times as much as the solid forgings, that the lower and sounder part only of the ingots may be used; and further, the diameter for the tube should be twice, and for the jacket as nearly twice as possible the diameter of the finished forging, in order that the part of the ingots used may be drawn out under the hammer—that for the tube to four times its primitive length, and that for the jacket to not less than two and one-half times its primitive length, more is desirable. When turned to the diameters shown on the drawing, the forgings should be free from spots or soft places on the exterior.

The physical qualities of the forgings, ascertained from tests of rings cut from each end after treatment, should be as follows, viz:

Nature.	Elastic limit.	Resistance at rupture.	Elongation at rupture.
	Tons.	*Tons.*	*Per cent.*
Tube	18	38	18
Jacket	20	40	14
Trunnion-hoops	20	38	7

To obtain the above qualities, using a low steel, special treatment will be requisite, the precise steps of which, as well as the most suitable proportion of carbon, must be ascertained by experiment. The general mode of procedure would be thus: After forging, the tube is annealed and specimens for test taken; if satisfactory, it is then rough bored and turned, and tempered in oil that is kept cool by a current of water, the time of its immersion in the oil being brief; it is then a second time annealed.

The above is the method employed in France and Russia for the treatment of gun steel, and differs, it is believed, from the process followed at the Royal Gun Factory and Sir William Armstrong's works in England, in annealing again after the oil tempering. Krupp dispenses with oil tempering altogether, claiming to attain equally good results by covering the ingots, when withdrawn from the mold, with hot ashes and keeping them so covered for months at a time, allowing the metal to cool very gradually. At the German works of Bochum also, and at Witten, gun steel is not oil tempered, as it is thought the process is attended with too much uncertainty. There, steel projectiles alone are tempered in oil. According to the Russian practice, it is stated, the tubes are allowed to remain in the oil tank only ten or fifteen minutes, and are then replaced in the heating furnace, from which the fire has in the mean time been withdrawn, and allowed to cool slowly.

The following tables, taken from French sources, give some data relative to the effect produced by this mode of treatment.

EFFECT OF TEMPERING AND ANNEALING ON CAST STEEL FOR GUNS.

The following table shows the influence of hammering, tempering, and annealing at different temperatures on cast steel run into ingots.

Treatment of the bars.	Limit of elasticity.	Ultimate strength.	Elongation at rupture.	Remarks.
	Tons.	*Tons.*	*Per ct.*	
Bars cut from the ingot in its natural state	15.7	28.7	6.0	
Bars cut from the ingot and then hammered	34.9	45.0	6.4	
Bar cut from the ingot and then hammered and tempered	27.3	52.5	10.3	Tempered in oil.
Bars cut from the ingot and then annealed at a yellow heat	20.0	35.5	11.9	
Bars annealed at a higher heat than the yellow	18.3	36.5	19.4	
Bars cut from the *annealed* ingot and afterwards tempered	24.7	48.0	7.4	Tempered in oil.
Bars cut from the *annealed* ingot and afterwards tempered and annealed.	22.6	38.0	19.0	Tempered in oil

The following results were obtained from several specimens of gun steel (Bessemer or Martin) forged and then tempered.

Tensile tests.	Krupp steel for hoops.		Krupp gun steel.			Creusot gun steel.		
	Natural state.	Tempered in oil.	Natural state.	Tempered in water.	Tempered in oil.	Natural state.	Tempered in oil.	Annealed after tempering.
Elastic limit, tons per square inch	16.5	19.0	.....	.....	.....	16.5	24.0	21.0
Elastic elongation, per cent	0.132	0.140	.....	.....	.....	.....	.....	.....
Ultimate strength, tons per square inch	34.8	48.5	41.3	48.5	62.0	36.0	44.5	41.5
Elongation at rupture, per cent	7.4	5.5	21	4.5	1.0	18.7	13.0	16.5

This mode of treatment, by annealing after oil tempering, would seem to give a more suitable metal—one that combines a high elasticity with a considerable ductility—than any other mode of which this Department has information, and it is claimed that steel thus produced is rendered fairly homogeneous.

There will also be required for the two guns in question a number of steel hoops of the following dimensions, viz:

Number of hoops.	Outside diameter, approximate.	Inside diameter, approximate.	Width, approximate.
	Inches.	*Inches.*	*Inches.*
For gun, total 39 { 11	32.1	26.2	8.2
For gun, total 39 { 18	25.0	20.0	7.4
For gun, total 39 { 10	20.6	15.4	8.5
For mortar, total 14. { 6	41.6	35.8	9.0
For mortar, total 14. { 8	37.0	29.0	11.0

The physical properties required for the hoops are as follows:

Elastic limit ..... tons.. 22
Resistance at rupture ..... do... 42
Elongation at rupture ..... per cent.. 9

The hoops would best be obtained by rolling, and the preference is given abroad to horizontal rolling-mills.

In case you possess a tire rolling-mill, the alterations necessary to adapt it to the manufacture of gun hoops should be determined with a view to rolling hoops of 12 inches width, if desired. A width of 7 inches is the least that would be accepted, exclusive of the margin of 1¼ inches from which specimens for test are taken.

The hoops, also, should the tests made for that purpose prove satisfactory and the operation be attended with certainty, would be oil-tempered. This seems to be the practice at present in Europe outside of Germany.

The data given below shows the excellent physical properties of the oil-tempered hoops manufactured at the Creusot Works in France and Sir Joseph Whitworth's works in Manchester, England. The figures were furnished this office directly from those works.

Physical qualities of very large hoops furnished by foreign manufacturers for guns.

Manufacturer.	Elastic limit.	Resistance at rupture.	Elongation at rupture.
	Tons.	*Tons.*	*Per cent.*
Creusot Works cast steel, tempered in oil	20	39	14.0
Whitworth & Co. soft state	19 to 23	32 to 36	24 to 28
Whitworth & Co. tempered in oil	25 to 30	40 to 50	15 to 20
Russian Government Works tempered in oil	23	37	8.0

Sir Joseph expresses his ability to furnish a stronger metal than the above and still retain ample elongation for gun material. Of the admirable quality of his steel there is no question, and his method of compressing the metal in the fluid state, and afterwards of subjecting it again to pressure instead of hammering, should seem to be the very best treatment for securing a sound and homogeneous product. It is stated, but with what authority is not known, that when Whitworth tempers his steel in oil he afterwards anneals it. The tube (oil-tempered) of the 12-inch Whitworth rifle tested at Gavre gave a strength of 47.6 tons per square inch, with an elongation of 20 per cent.

The following table shows the influence of tempering on steel bars with different proportions of carbon.

INFLUENCE OF CARBON.

The results of some experiments made at Terre-Noire, on steel bars 0.8 inch in diameter and 7.9 inches long, are here given.

Amount of carbon.	Condition of the bars.	Elastic limit.	Resistance at rupture.	Elongation.
		Tons.	*Tons.*	*Per cent.*
0.150	Raw state	11.0	23.0	32.5
	Tempered in oil	20.0	29.0	26.0
	Tempered in water	18.0	28.0	19.0
0.490	Raw state	15.0	30.0	24.8
	Tempered in oil	27.0	48.0	12.0
	Tempered in water	30.0	52.0	2.5
0.709	Raw state	18.0	39.0	10.0
	Tempered in oil	47.0	69.0	4.0
	Tempered in water	Broke in tempering.		
0.875	Raw state	20.0	49.0	8.4
	Tempered in oil	58.0	68.0	1.0
	Tempered in water	Broke in tempering.		
1.050	Raw state	25.0	56.0	5.2
	Tempered in oil	Broke in tempering.		
	Tempered in water			

SIR WILLIAM ARMSTRONG'S EXPERIMENTS ON A STEEL CASTING FOR A TRUNNION HOOP (UNHAMMERED).

0.36	Before tempering in oil	16	27.8	7.5
	After tempering in oil	25	37.7	12.5

The Department will also require a steel tube for a 10-inch rifle wound with wire. The diameter of the forged tube will be about 17 inches, and the length 26½ feet.

It is hoped that all the steel for the experimental guns to be manufactured this summer can be procured from home manufacturers, so that the Department may be able to furnish the next Congress with such information as to the ability of our steel-makers to produce suitable gun forgings as will warrant the request for a liberal appropriation for the production of steel guns; thus we may hope to gradually develop our home facilities until we are in condition to manufacture steel guns of the largest caliber. It is believed the steel can be furnished if, for the present, the steel-makers will co-operate with one another, the works possessing the best furnaces, for instance, casting the ingots, and then arranging with the works possessing the heaviest hammers to do the forging until their own facilities are sufficient for the purpose.

It is the desire of the Department and the intention of the law to depend on home products exclusively, if possible, but if the heavier forgings must now be procured abroad, the lighter ones may still be produced here. Rolled hoops, especially, should be manufactured here with comparatively little delay or trouble.

Should the proposed 12-inch experimental mortar, cast iron, hooped with steel, prove successful, as there is every reason to believe it will, from the good results obtained with like constructions abroad, it is the intention of the Department to make application to Congress for sufficient appropriations to fabricate a considerable number of such pieces. The manufacture of steel hoops is one of the first and simplest steps in the production of gun steel, and has been in successful operation abroad even where the industries were unable to produce the larger and more difficult forging required for gun tubes.

It is urged upon our steel-makers to give this subject their serious consideration. The Department desires to give all possible assistance and encouragement in this matter.

With your reply I should be pleased to have an expression of your views generally upon the subject-matter of this letter.

Very respectfully, your obedient servant,

S. V. BENÉT,
Brigadier-General, *Chief of Ordnance.*

The replies to this letter were, with one or two exceptions, adverse to undertaking such work, arising, I presume, from want of skill and knowledge in the treatment of steel for gun construction, and from the want of the requisite plant to perfect the forgings. The conclusion reached was that the plant or the experience in this country cannot as yet produce the steel forgings, for tube and jacket, for so large a gun as an 8-inch caliber. The tubes and jacket required for the 8 and 10 inch steel guns have therefore been ordered from Sir Joseph Whitworth & Co., England.

The steel hoops required for the banded guns being of comparatively small mass, and readily produced from an ordinary tire mill, their manufacture has been undertaken by the Midvale Steel Company of Philadelphia. Three experimental hoops were ordered from this company for test, in order to ascertain how nearly they could come up to the requirements of the Department's circular letter. Two of these hoops were of the largest size that will be required for the experimental guns, and one was annealed after rolling, while the other was oil-tempered and annealed. The third hoop was hammered and oil-tempered, being of the size required for the smaller hoops of the 8-inch gun, which are not sufficiently large to admit of being rolled in the mill at the Midvale Works.

The results obtained from the mechanical tests of these hoops, both by traction and by hooping tests (see Appendixes 41 and 42), show that they are fully equal in quality to the best hoops of European manufacture.

The mean results obtained in the tests by traction, on specimens 2 and 3 inches between shoulders, are as follows:

Nature.	Elastic limit.	Ultimate strength.	Ultimate elongation.
	Lbs.	*Lbs.*	*Per cent.*
Large rolled oil-tempered hoop	54,666	98,333	21.0
Large rolled annealed hoop	44,700	101,714	18.12
Small hammered oil-tempered hoop	59,000	97,200	16.4

The success attained in the fabrication of these hoops reflects credit on the manufacturers, and testifies to their knowledge both of the qualities requisite in gun hoops, and the best methods of manufacture and treatment for producing them.

The above guns being of an experimental character, their dimensions, and therefore their weight, are somewhat greater than is strictly called for from the probable strains to be endured. But in this respect they can be modified after trial should the results warrant it. In the 8-inch steel gun the tubes and jacket are made as light as is consistent with the requisite strength in order to bring these forgings within the limits of our own manufacturing facilities as early as possible. The employment of two rows of hoops with a gun of this caliber gives a more elaborate construction than is desirable, which may hereafter give way to a single row of hoops, as shown on alternate plan, Appendix 39, should the manufacturers be able, after more experience, to produce the thick hoops with the same certainty of success as the lighter ones. As the construction now stands it should be quite applicable to a gun of 10-inch caliber.

As regards the two 12-inch cast-iron rifles, the Department was requested by the South Boston Iron Works, whose representations before the committee were positive and strongly favorable to cast-iron guns,

to line one of them with a thin steel tube. This proposition was acceded to, but it was deemed best to strengthen the steel tube by wrapping it with steel wire, as shown on the Department plan, Appendix 39.

Under the provision of the appropriation act to make and test a cast-iron gun banded with steel, it was at first thought best, on account of its greater simplicity, to make a 12-inch gun on the Italian system, but unfavorable reports having been received of the behavior of the Italian 12-inch guns when chambered for charges of 230 pounds, that system was abandoned for the French, and the plan shown in Appendix 39 adopted.

The 10-inch cast-iron wire-wrapped gun has been modified—in consultation with Dr. Woodbridge—from the plan submitted to the committee, by extending the wire wrapping further forward and under the trunnions.

As regards the 12-inch mortar, cast-iron hooped, experiments are already in progress for determining the most suitable rifling and projectiles. Two 10-inch Rodman smooth-bore guns, cut off at the muzzle to give the proper length of bore, and rifled, were provided for these experiments. The results thus far obtained are fair, and encourage the hope that with our service projectiles a good degree of accuracy may be realized from a muzzle-loading rifled mortar.

The tube for the 10-inch steel-wire gun has been ordered, and the question of a suitable quality of wire, and the best method of producing the longitudinal bars, is being practically worked out by the inventor.

Under the provisions of the law to select two breech-loading devices for test, the Mann and Yates were selected. These guns will be obtained by suitably modifying and lining with a steel tube a 10-inch Rodman smooth-bore gun.

Among the recommendations I made to the Logan Committee was the continuing of the conversion of 10-inch smooth-bores into muzzle-loading 8-inch rifles. That recommendation was based on the satisfactory endurance of the 8-inch rifle, and the penetrating power of its shot at 1,000 yards. Appendix 29 gives the report of this trial "with chilled projectiles against armor plates." The target, 12 inches thick, was composed of three 4-inch plates of wrought iron. Each plate was made by welding and rolling seven 1-inch plates to a single plate 4 inches thick. The quality of the iron was excellent, having a tenacity of 45,000 pounds to the square inch. The plates were assembled by twelve bolts with countersunk heads, which passed through a 24-inch oak backing and a 1-inch plate. The results of the trial show that the 8-inch rifle has sufficient power to penetrate wrought-iron armor eight inches thick at 1,000 yards, and this will include that of more than one-half of the armored vessels of the world. For places where the depth of water will only admit vessels of light draught and of comparatively thin armor, and for secondary positions in more important places, this gun will fulfill all the conditions of a good defense.

Appendix 34 gives the report on the proposed alterations of the carriage to adapt it for the 8-inch rifle. The hydraulic buffer, retraction gear, &c., will hereafter be applied to all such carriages.

Another recommendation made to the committee was the utilization of our three hundred 15-inch smooth-bore guns, by supplying the carriages with hydraulic buffers to absorb the recoil and thus enable us to use the heaviest charges. That the 15-inch is a powerful gun will appear from the report of its trial with steel and chilled cast-iron spherical shot against armor plates (see Appendix 36). The armor-plate target, 6 feet by 11 feet in size, was composed of three plates, two 4 inches

thick and one 2 inches thick, total thickness 10 inches, backed by two layers of 10-inch oak timbers, and 1-inch skin plate. These were firmly bolted together by cylindrical wrought-iron bars two and one-half inches diameter, countersunk in the 2-inch face-plate, &c. The target was strongly supported by wrought-iron channel-beams and horizontal beams embedded in the sand. With a charge of 130 pounds powder and a 450-pound shot, the penetrating power was 10 inches of iron at 1,000 yards, showing that with our improved powders the projectile energy of this gun has been largely increased, and renders it not only efficient for secondary purposes, but a very formidable weapon even in our most important harbors.

Appendix 35 gives the report of the alterations in the carriage deemed absolutely necessary to enable this gun to be used with the maximum charges.

GUN FOUNDRY BOARD.

This Board was constituted under the following order:

[General Orders, No. 20.]

HEADQUARTERS OF THE ARMY,
ADJUTANT-GENERAL'S OFFICE,
Washington, April 3, 1883.

By direction of the Secretary of War the following order of the President is published for the information of the Army:

EXECUTIVE MANSION,
Washington, April 2, 1883.

Under the provisions of section one of the "act making appropriations for the naval service for the fiscal year ending June thirtieth, eighteen hundred and eighty-four, and for other purposes," approved March 3, 1883, the following-named officers of the Army and Navy will constitute a Board for the purpose of examining and reporting to Congress which of the navy-yards or arsenals owned by the Government has the best location and is best adapted for the establishment of a Government foundry, or what other method, if any, should be adopted for the manufacture of heavy ordnance adapted to modern warfare, for the use of the Army and Navy of the United States, the cost of all buildings, tools, and implements necessary to be used in the manufacture thereof, including the cost of a steam hammer or apparatus of sufficient size for the manufacture of the heaviest guns:

Commodore *Edward Simpson*, United States Navy.
Capt. *Edmund O. Matthews*, United States Navy.
Col. *Thomas G. Baylor*, Ordnance Department, United States Army.
Lieut. Col. *Henry L. Abbot*, Engineer Corps, United States Army.
Maj. *Samuel S. Elder*, Second Artillery, United States Army.
Lieut. *William H. Jacques*, United States Navy.

CHESTER A. ARTHUR.

By command of General Sherman:

R. C. DRUM,
Adjutant-General.

The Board has visited the principal steel and iron works in this country and is now abroad pursuing its investigations among the great steel works and gun factories of Europe.

It is hoped that it will be able to submit to Congress such a strong and full report, and make such definite recommendations, that Congress will be able to take prompt action towards providing for the country's great want in suitable facilities and plant for the manufacture of heavy Ordnance.

STEEL GUNS AND METAL CARRIAGES FOR FIELD SERVICE.

The Midvale Steel Works, Philadelphia, are now manufacturing the steel parts for a breech-loading field gun, caliber 3.2 inches, designed by the Ordnance Board, under instructions from this office. This gun

will be completed in time to be tried next spring, and, should it be a success, a supply of such will be procured for the Army.

A few metal carriages have been made at the Watervliet Arsenal, and will be issued to the light batteries for trial. As soon as any defects are found and corrected, a supply will be provided for the service. This carriage embodies two new and important features, designed and applied by Lieutenant-Colonel Buffington, Ordnance Department, consisting of a *reinforced axle*, to prevent its bending and breaking under the increased strains and shocks due to largely increased charges, and a *spring brake* to check the severe recoil. These novel features have stood the test of continued firing, and have simplified the problem of field-carriage construction.

MILITIA.

It is difficult to realize the fact that more than half a generation has passed since the close of the war, and yet that simple fact has a vital bearing for weal or woe on the status of the militia and the arms-bearing force of the country. Recruits for the Army must be between sixteen and thirty-five years of age at the time of their enlistment. In the militia every able-bodied male citizen who is of the age of eighteen and under forty-five years shall be enrolled. The war having lasted four years, the million of men in the service at its close must have been between the ages of sixteen and thirty-nine—those at sixteen being raw recruits, those at thirty-nine being hardened veterans of many campaigns—the mean age being twenty-eight in 1865; if to this be added the eighteen years since the war, the mean age of the soldiers mustered out at the end of the war would be forty-six at the present time, an age about the maximum required for the militia. But even those who were sixteen at the end of the war would now be thirty-four, within one year of the maximum limit required for the Army. It thus appears that in another decade the last remnant of that grand army will have passed beyond the limit of active military service. All the field experiences of the greatest war of modern times will then be lost to the future, and the country's dependence will rest solely on a people whose success in war may have to be gained through reverses and disappointments.

The remedy for this state of affairs is simple and plain. Substantial encouragement should be given to the formation of volunteer organizations in every State, district, and city, by liberal appropriations made by Congress to supply the arms, equipments, tents, ammunition, and other ordnance stores. A well-digested system of organization, and a proper recognition of successful efforts in enforcing strict discipline and perfect drill, would go far to keep such organizations in heart and in the confidence of the country.

The act of 23d of April, 1808, makes an annual appropriation of $200,000 "for the purpose of providing arms and equipments for the whole body of the militia." The bill (S. 1596) reported from the Senate Committee on Military Affairs, during the last Congress, is so liberal and important in its provisions that I venture to insert it here in full, in the hope that it may receive the attention it deserves. I strongly recommend the passage of such a law.

The bill is as follows:

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That section sixteen hundred and sixty-one of the Revised Statutes be, and the same is hereby, amended and re-enacted so as to read as follows:

SECTION 1. That the sum of six hundred thousand dollars is hereby annually appropriated, to be paid out of any money in the Treasury not otherwise appropriated, for

the purpose of providing arms, equipments, ammunition, ordnance stores, and tents for the militia.

SEC. 2. That said appropriation shall be apportioned among the several States and Territories on the books of the Ordnance Department by the Chief of Ordnance of the Army, under the direction of the Secretary of War, according to the number of Representatives or Delegates to which each State and Territory respectively is entitled in the Congress of the United States: *Provided, however*, That each State and Territory shall only be entitled to the benefits of so much of the appropriation apportioned to it as the proportion of the number of the regularly enlisted, organized, and uniformed active militia, as determined by the report of the Secretary of War made on the preceding first Monday in February, bears to the maximum number of active militia for which such State or Territory is entitled to the benefits of this act. And the amount of said appropriation which is thus determined not to be available shall be covered back into the Treasury.

SEC. 3. That in time of peace the number of active militia for which each State and Territory shall be entitled to receive its apportionment of the appropriations made by this act shall not exceed six hundred regularly uniformed commissioned officers and enlisted men for each Representative and Delegate to which such State or Territory is entitled in the Congress of the United States.

SEC. 4. That the purchase or manufacture of ordnance, ordnance stores, and tents for the militia under the provisions of this act shall be made by the Chief of Ordnance of the Army, under the direction of the Secretary of War, and they shall be receipted for and shall remain the property of the United States, and be annually accounted for to the Chief of Ordnance of the Army by the governors of the States and Territories, for which purpose the Chief of Ordnance of the Army, under the direction of the Secretary of War, shall prescribe and supply the necessary blanks, and make such regulations as he may deem necessary to protect the interest of the United States.

SEC. 5. That all arms, equipments, ordnance stores, or tents which may become unserviceable or unsuitable shall be examined by a board of officers of the militia, and its report shall be forwarded by the governor of the State or Territory direct to the Chief of Ordnance of the Army for the action of the Secretary of War, who shall direct what disposition, by sale or otherwise, shall be made of them; and the proceeds of such sale shall be covered into the Treasury of the United States.

SEC. 6. That for all the purposes of this act the District of Columbia shall be accounted and treated as a Territory entitled to one Delegate in Congress.

The following quotations are from the committee's report, which accompanies the bill:

That in addition to the resolution instructing us to consider the propriety of increasing the annual appropriation for the militia, there have been referred to us a large number of petitions from the officers of the militia relative to an increase of the appropriation and other amendments to the existing militia law.

And again:

A simple statement of fact appears to be a sufficient response to the resolution of the Senate. That an appropriation fixed in 1808 to provide for seventeen States, with a population of eight millions, is inadequate to provide for thirty-eight States with a population of fifty millions, needs no argument. The Chief of Ordnance has for many years urged Congress to increase the appropriation; it was considered and favorably reported to the Senate by this committee in the Forty-fifth Congress, and we think it would be difficult to conceive any reasonable argument against it. * * *

It will be perceived that no provision is made as to the mode of apportioning the appropriation between the States, no requirements for accountability for the property furnished, or limitation on the disposition that the States may make of it. The greatest defect of the law, however, is that it does not allow the furnishing of tents and other articles necessary to provide for camps of instruction. To this omission of the law is largely due the disparity between the different States in the strength and efficiency of the militia.

* * * We accordingly report herewith a bill to increase the annual appropriation to $600,000, and making provisions for its apportionment, and for the care, accountability, and disposition of property issued under it. We also provide in the bill that each State shall only receive such proportion of the amount apportioned to it as the actual number of its active militia bears to a fixed maximum, and we believe this provision wisely calculated to foster and encourage the formation of volunteer organizations in those States where but few now exist.

There have been no material changes in the law relative to the organization of the militia since its original enactment in 1792, and it is obvious that many of its provisions are now obsolete and many amendments desirable.

UNITED STATES TESTING MACHINE.

The commanding officer of the Watertown Arsenal has made his report of tests of iron, steel, and other materials for industrial purposes for the last fiscal year. The report will be submitted to you for transmission to Congress at the next session, as required by law.

The law also provides as follows:

And the Chief of Ordnance shall give attention to such programme of tests as may be submitted by the American Society of Civil Engineers, and the record of such tests shall be furnished said society, to be by them published at their own expense.

As the result of correspondence and interviews, the following programme was received from the Society of Civil Engineers:

AMERICAN SOCIETY OF CIVIL ENGINEERS,
127 EAST TWENTY-THIRD STREET, N. Y.,
December 23, 1882.

General S. V. BENÉT,
Chief of Ordnance, U. S. A., Washington, D. C.:

DEAR SIR: The Board of Direction of the American Society of Civil Engineers has had under careful consideration the subject of the preparation of a programme of tests of structural materials, to be submitted to you in accordance with the provisions of the last army appropriation bill. In this duty the Board, through its president and secretary, has consulted a number of persons interested in the investigation, production, and use of structural materials, and including not only members of this society, but also members of the American Institute of Mining Engineers, and of the American Society of Mechanical Engineers.

In response to a letter on the subject a number of replies have been received, an abstract of which has been compiled, and a copy of which abstract is at your service.

Some delay has occurred in communicating with you. This delay has been occasioned by the illness and death of our late president, Mr. Aahbel Welch, who was chairman of the committee having this particular matter in charge, and who was about to call upon and consult with you when prevented by his last illness.

A number of the gentlemen interested in this subject recently met, and after considering all the suggestions that had been received, brought into practical shape a general programme, which the vice-president of this society informally submitted to you a few days since. In accordance with your suggestion at that time, there is presented to you herewith this programme.

PROGRAMME.

Congress has appropriated the sum of $10,000 for "caring for, preserving, using, and operating the United States Testing Machine at the Watertown Arsenal" for the fiscal year ending June 30, 1883.

In order to produce the largest immediate results with the small amount appropriated, we suggest that the investigation be limited this year to the compression members of structures, and that co-operation be invited from railroad companies, bridge engineers, architects, and manufacturers and users of structural material strained in compression.

For this purpose we suggest that the Ordnance Department of the United States Army should offer to pay the freight on and to test duplicate compression members, either from structures which such parties may have in progress of construction or special shapes prepared for this purpose, provided the same be furnished free of further cost.

If the parties will cause to be manufactured one or more duplicate compression parts from each bridge or structure which they may undertake hereafter, or will furnish special shapes, varying in proportions, preferably in series from twenty to sixty diameters, and varying by increments of five diameters; or if they will manufacture special shapes which they desire to have tested; if they will also furnish at least three small or hand specimens of the same material, prepared as indicated in the note below;* if they will place those parts and pieces, free of cost, on board of some

* These three or more small or hand specimens to be of the same material as the compression member furnished; to be rectangular, and to be reduced to one-half of one square inch in area of section; to be of the same thickness as that used in the construction of the member, unless that thickness should exceed one inch, in which case the small specimen is to be reduced to one inch.

It is desired as far as practicable to shape these specimens from pieces of the same section as those composing the member, preserving the surfaces as they come from the rolls, excepting the removal of the outer scale.

The length of these specimens should be two feet.

transportation line, obtaining the lowest available rate of freight to Watertown Arsenal, and notify the Chief of Ordnance of the particulars of shipment, also furnishing, so far as they can, a statement of the composition of the metal, and its process of manufacture, and a diagram showing the position the member is intended to hold in the structure, and the computed strain it is expected to bear, that then the Ordnance Department will:

1. Pay the freight on the shipment from the initial point to Watertown Arsenal.
2. Test the compression pieces in due course, as well as the hand specimens.
3. Account to the shipper for the value of the scrap, if required, when the same is sold, or return the same to the shipper, if preferred, paying the freight from Watertown.
4. Furnish the shipper an early special report of the results of the tests of all pieces sent by him, giving him an opportunity of sending a second piece to cover any defects that may have occurred.
5. Furnish the American Society of Civil Engineers promptly, for publication and distribution, full copies of all tests and information obtained therefrom.

Respectfully submitted.

W. H. PAINE,
Vice-President American Society Civil Engineers.
JOHN BOGART,
Secretary American Society Civil Engineers.

This programme, with a circular letter from this office, was widely distributed among engineers and manufacturers. In the hope that the appropriation for the present fiscal year would suffice, I agreed to pay the cost of transporting the specimens to be tested; but subsequently I had to withdraw my consent, the money appropriated not justifying the expenditure. Under the programme no specimens have been received for tests, and I am satisfied that no dependence can be, or should be, placed on voluntary contributions in a matter so vital to the material interests of the country. This work is a national affair, and the necessary expense should be borne by the United States. All that should be required of the Society of Civil Engineers is the preparation of a programme for series of tests; the purchase and preparation of material, and the making of the tests to be paid out of moneys appropriated by Congress.

The number of specimens tested on the Watertown Arsenal machine, during the year ending June 30, 1883, was 4,649. Only 539 of this number were for private parties. More than seven-eighths, therefore, of all the tests made were for the Government service. It is fair to believe that this public work will increase from year to year, and that the day is not far distant when the machine will have to be used exclusively on Government work.

The capacity of this machine is limited to tests of extension and compression. Additional machines should be provided for the tests of torsional and transverse resistance, and estimates have been submitted.

I have the honor to submit the following papers, heretofore referred to:

Appendix 1.—Statement of principal articles procured by fabrication at the arsenals during the year ended June 30, 1883.

Appendix 2.—Statement of principal articles procured by purchase at the arsenals during the year ended June 30, 1883.

Appendix 3.—Statement of ordnance, ordnance stores, &c., issued to the military establishment, exclusive of the militia, during the year ended June 30, 1883.

Appendix 4.—Apportionment for the fiscal year ended June 30, 1883, of the annual appropriation of $200,000 for arming and equipping the militia, under sections 1661 and 1667, Revised Statutes.

Appendix 5.—Statement of ordnance, ordnance stores, &c., distributed to the militia from July 1, 1882, to June 30, 1883, under section 1667, Revised Statutes.

Appendix 6.—Statement of arms, ammunition, &c., distributed to the Territories and States bordering thereon from July 1, 1882, to June 30, 1883, under the joint resolutions of July 3, 1876, March 3, 1877, and June 7, 1878, and the act of May 16, 1878.

Appendix 7.—Statement of ordnance, ordnance stores, &c., distributed to colleges from July 1, 1882, to June 30, 1883, under section 1225, Revised Statutes.

Appendix 8.—Statement of arms and ammunition issued to the executive departments during the year ended June 30, 1883, under the provisions of the act of March 3, 1879.

Appendix 9.—Report of action taken during the year ended June 30, 1883, under the provisions of the act approved March 3, 1881.

Appendix 10.—Determination of the value of "c" by Didion's formula for computing the elements of the trajectory in air. By Capt. John E. Greer, Ordnance Department.

Appendix 11.—Instructions for use of the Frankford Arsenal hand-tools for reloading cartridges. By Maj. S. C. Lyford, Ordnance Department. (One plate.)

Appendix 12.—Report on rifle target practice in the Army. By Bvt. Brig. Gen. John C. Tidball, U. S. A.

Appendix 13.—Report on swelled and burst small-arm barrels received from the Army. By a board of officers under the direction of Lieut. Col. A. R. Buffington, Ordnance Department.

Appendix 14.—Direct application of power. By Lieut. Col. A. R. Buffington, Ordnance Department. (One plate.)

Appendix 15.—Bartlett's formulas. By Maj. Geo. W. McKee, Ordnance Department.

Appendix 16.—Report on the tertiary history of the Grand Cañon District. By Capt. C. E. Dutton, Ordnance Department.

Appendix 17.—Report on the improved arm-rack for small-arms, manufactured at the Rock Island Arsenal. By Lieut. Col. D. W. Flagler, Ordnance Department. (Three plates.)

Appendix 18.—Report on an improved capstan. By Capt. Henry Metcalfe, Ordnance Department. (One plate.)

Appendix 19.—Report of some improvements introduced at Frankford Arsenal. By Maj. S. C. Lyford, Ordnance Department. (12 plates.)

Appendix 20.—Headless shell extractor for small-arms. By Lieut. Col. A. R. Buffington, Ordnance Department.

Appendix 21.—Report on brush material and the manufacture of brushes. By Capt. A. L. Varney, Ordnance Department. (41 plates.)

Appendix 22.—Report of mechanical tests of wrought-iron jackets for 8-inch rifles. By Lieut. Rogers Birnie, jr., Ordnance Department.

Appendix 23.—Report on the fabrication of 8-inch projectiles. By Capt. D. A. Lyle, Lieut. C. W. Whipple, and Lieut. H. D. Borup, Ordnance Department.

Appendix 24.—Description of the United States testing machine at Watertown Arsenal. By Capt. J. Pitman, under the direction of Maj. F. H. Parker, Ordnance Department, commanding. (12 plates.)

REPORTS OF THE ORDNANCE BOARD.

Appendix 25.—Trial of R. J. Gatling's torpedo gun, caliber 1.45 inches. (4 plates.)

Appendix 26.—Trial of a new magazine feed for the Gatling gun, caliber .45 inch, arranged for the bottle-shaped cartridge. (4 plates.)

Appendix 27.—Trial of a Hotchkiss flank-defense revolving cannon, caliber 1.5748 inches (40 millimeters). (11 plates.)

Appendix 28.—Trial of Gatling gun, caliber .45 inch, with new feed magazine, modified. (3 plates.)

Appendix 29.—Trial of 8-inch rifle with chilled projectiles against armor plates. (11 plates.)

Appendix 30.—Comparison of Rodman, Woodbridge, and Crusher gauges. (1 plate.)

Appendix 31.—Design for a steel field gun with the interrupted screw fermeture. (1 plate.)

Appendix 32.—Trial of a new steel field carriage for the 3.2-inch breech-loading rifle. (2 plates.)

Appendix 33.—Trial and test of a 3.2-inch breech-loading rifle and carriage. (2 plates.)

Appendix 34.—Report on converted carriage for 8-inch rifles. (1 plate.)

Appendix 35.—Report of firing a 15-inch smooth-bore gun with increased charges on a modified barbette carriage. (1 plate.)

Appendix 36.—Firing of 15-inch smooth-bore gun with chilled projectiles against armor plates. (4 plates.)

Appendix 37.—Trial of L. A. Merriam's 3-inch rifle. (1 plate.)

Appendix 38.—Report of the principal operations at the Rock Island Arsenal, Illinois, during the fiscal year ended June 30, 1883, Lieut. Col. D. W. Flagler, Ordnance Department, commanding. (9 plates.)

Appendix 39.—Experimental guns being fabricated, under contract. (9 plates.)

Appendix 40.—Showing the stations and duties of the officers of the Ordnance Department.

Appendix 41.—Mechanical tests of specimens taken from steel hoops for cannon. By Lieut. C. W. Whipple, Ordnance Department.

Appendix 42.—Shrinkage tests of steel hoops for cannon. By Lieut. Rogers Birnie, jr., Ordnance Department. (2 plates.)

I have the honor to be, very respectfully, your obedient servant,

S. V. BENÉT,
Brigadier-General, Chief of Ordnance.

To the Hon. SECRETARY OF WAR.

REPORT

OF

THE SECRETARY OF THE NAVY.

NAVY DEPARTMENT,
Washington, December 1, 1883.

To the President:

SIR: The three new steel war-vessels and the armed dispatch-steamer, authorized at the last session of Congress, which have been named the Chicago, Boston, Atlanta, and Dolphin, are in course of construction, and will be completed, the cruisers within eighteen and the dispatch-boat within twelve months from the last week in July, 1883.

The general dimensions and characteristics of the ships will be as follows:

	Length.	Breadth.	Draft.	Displacement.	Indicated horse-power.	Estimated sea-speed.	Estimated smooth-water speed.	Capacity of coal bunkers.	Armament of heavy guns.
	Feet.	*Feet.*	*Feet.*	*Tons.*		*Knots.*	*Knots.*	*Tons.*	
Chicago	315	48	19	4,500	5,000	14	16	940	14
Boston	270	42	17	3,000	3,500	13	14	580	8
Atlanta	270	42	17	3,000	3,500	13	14	580	8
Dolphin	240	32	14	1,500	2,300	15	.....	310	1

These vessels represent three main types of unarmored war-ships now universally considered as indispensable components of any fleet suitable for general national service upon the high seas. The Chicago is an example of the largest and best unarmored cruising and fighting vessels now built, and will have no superior in the world in the combination of speed, endurance, and armament. In the Boston and Atlanta, speed and endurance have been given full development, while their fighting power has been notably increased by placing the battery in a central superstructure on the spar-deck, and adopting a brig rig, thereby leaving the extremities clear and unobstructed for fore and aft fire.

In the Dolphin an important auxiliary in naval operations will be obtained, and she is expected to furnish an excellent model from which

may be expanded a high-speed commerce-destroyer, instead of taking as a standard either the overgrown merchant line steamers or the large and expensive dispatch-vessels which have been built abroad, of questionable utility in time of peace.

The ships are now under construction in accordance with the Appropriation Acts of August 5, 1882, and March 3, 1883, authorizing such increase of the Navy, under the advice and supervision of the Naval Advisory Board, which has consisted of Rear-Admiral Robert W. Shufeldt as president and as additional members Mr. Henry Steers, naval architect, Mr. Miers Coryell, marine engineer, Chief-Engineer Alexander Henderson, Commander John A. Howell, Lieutenant Edward W. Very, and Naval Constructor Frank L. Fernald. By public advertisement and notice of August 5, 1882, as required by the Act of that date, all designers and builders of ships, marine engines, or ordnance were invited to submit plans of any of the vessels, or any part thereof, within the period of sixty days after August 20; and further notice was given November 17 that such period would be extended up to the time for final decision and action. After the general features of the vessels were indicated by the Board, they were submitted to all shipbuilders likely to make proposals for their construction, with requests for their advice and suggestions concerning the designs, with the view of reaching such final plans and specifications as would give the best and most effective ships that could be built. All plans, models, designs, suggestions and explanations from any quarter were fully examined and reported upon by the Board. The general features and essential requisites of the ships having been settled by the Department and the Advisory Board, the plans and specifications were prepared by the Bureaus of Construction and Repair and of Steam Engineering; and on the 2d day of May, 1883, advertisements were published, as required by the Act of March 3, 1883, inviting proposals for their construction, which were opened on Monday, July 2, and all the contracts were on the day following awarded to the lowest bidder, Mr. John Roach, of New York City. The contract for the Chicago is dated July 26, with a bond for due completion in the sum of $500,000; the contracts for the Boston and Atlanta are dated July 23, with bonds for $300,000 each; the contract for the Dolphin is dated July 23, with a bond for $150,000.

The estimates, the contract prices, and the next lowest bids were as follows:

	Cost estimated by the Advisory Board.	Contract prices.	Next lowest bids.
Chicago	$1,248,000	$889,000	$1,080,000
Boston	783,500	619,000	650,000
Atlanta	783,500	617,000	650,000
Dolphin	399,000	315,000	375,000

showing a total cost for the hull and machinery of the vessels, excludin the masts, spars, boats, and rigging, for preparing which the navy-yard are to be utilized, of $2,440,000, being $774,100 less than the estimate and $315,000 less than the next lowest bids.

The statutes authorizing the construction of the cruisers require tha they shall be built of "steel of domestic manufacture having as near a may be a tensile strength of not less than 60,000 pounds to the squar inch, and a ductility in 8 inches of not less than 25 per centum." Fear were, for a time, entertained that contracts for building the vessels coul not be effected at reasonable prices, because of the hesitancy of the stee makers of this country to bind themselves to furnish the steel required subject to the scientific and practical tests prescribed by the Advisor Board to ensure a compliance with the law. All difficulties have, how ever, been happily overcome; and the demonstration that such materia can be here produced at moderate cost, is, of itself, of great importanc in the progress of our mechanical industries.

ARMORED VESSELS.

The double-turreted monitors Puritan, Amphitrite, Terror, and Mon adnock have been launched in accordance with the directions of th Act of August 5, 1882. The Naval Advisory Board having been di rected by the Act to investigate the question of completing these iron clads, and having reported December 15, 1882, that it would be wis and expedient to finish them, Congress, in the Act of March 3, 188 appropriated $1,000,000 for their engines and machinery, but directe that no contract should be made until the terms thereof should be ap proved by the Board, and that it should approve only such as shoul be to the best advantage of the Government, and fair and reasonabl according to the lowest market price for similar work.

The Board, after full and careful investigation, determined that fai and reasonable prices would be for the engines and certain connectin hull-fittings of the Puritan $410,209.99, of the Amphitrite $208,712.3 of the Terror $208,712.32, and of the Monadnock $216,006.82; and con tracts for the completion of the engines and fittings within eighte months from January 15, 1883, at the prices named, were made by th Department and approved by the Board, according to the terms of th Act, with Mr. John Roach, of New York City, the Harlan and Hollings worth Company, of Wilmington, Del., and the William Cramp & Son Ship and Engine Building Company, of Philadelphia, for the Puritan Amphitrite, and Terror respectively. No contract for the machiner of the Monadnock has yet been concluded, but it is the intention of th Department to make one, at the price estimated, with the proprietors o such marine-engine shop on the Pacific coast as possesses the best fa cilities for the prompt execution of the work.

The Act of August 5, 1882, provided for building and fitting the tur

rets and pilot-house of the Miantonomoh, but satisfactory progress has not been made with the work. It was determined not to proceed until after testing the machinery by a sea trial, which was not completed until December. Careful and protracted consideration by the Department and the Naval Advisory Board led to the conclusion that it was desirable to construct the best modern roller-base turrets, and proposals for the compound armor plates were called for by an advertisement of August 20, 1883, to be opened on October 9. No proposals were received from this country and only one from abroad, that of Messrs. John Brown & Co. and Charles Cammell & Co., of Sheffield, England, through their agents, Messrs. William H. Wallace & Co., of New York, with whom a contract was made November 13, 1883, for the delivery in New York of the plates for the turrets in six months, and of those for the pilot-houses in ten months, at the price in their proposal of £110 per ton of 2,240 pounds, or about $118,000. In view of the large amount of compound armor or of steel armor which will be required for the completion of the four other monitors, it is desirable that Congress should in some way encourage its manufacture in this country.

The cost of completing the four monitors is estimated by the Naval Advisory Board in a report of October 25, 1883, as follows:

	Hull.	Machinery; turret-gear.	Ordnance.	Total.
Puritan	$955, 341 56	$13, 890	$172, 250	$1, 141, 481 56
Amphitrite	639, 583 68	11, 500	146, 480	797, 563 68
Terror	627, 287 68	11, 500	146, 480	785, 267 68
Monadnock	701, 441 70	11, 500	161, 128	874, 069 70
Total to complete all monitors				3, 598, 382 62

Their completion is earnestly recommended, as they will provide floating harbor defenses sufficient for present purposes, and may justify us in further postponing the construction of any such expensive broadside armored ships as have so heavily burdened the treasuries of other nations.

ADDITIONAL NEW VESSELS PROPOSED.

The present condition of our national fleet makes it necessary that the work of reconstruction should be continued as rapidly as a due regard for economy will admit. Accordingly the Advisory Board submitted a report dated October 25, 1883, of its views as to the new work which should be undertaken in the coming year. It recommends the construction of seven additional unarmored steel cruisers, three of which should conform to the types already adopted, as represented by the Chicago, the Boston, and the Dolphin. Of the other four, two should be heavily armed cruising gunboats of about 1,500 tons displacement. These would be of the same size as the Dolphin, but constructed on a different plan, because intended to supply a different want. In

the Dolphin, which is designed for a specific purpose, actual fighting and working qualities are limited, in order to obtain the maximum speed and endurance possible with her size, while in the proposed vessels the aim will be to secure the highest amount of efficiency for general service, both in peace and war. Finally, in view of the necessity for a certain number of vessels of small size and light draft, the Board recommends the construction of two gunboats of about 750 tons displacement, and not more than nine feet draft, which shall be capable of going to sea and also of navigating shallow waters.

The estimated cost of vessels of the proposed types is as follows:

Type.	Hull.	Machinery.	Ordnance.	Equipment.	Total.
Chicago	$650,000	$350,000	$225,000	$70,600	$1,295,000
Boston	450,000	260,000	168,000	58,000	936,000
Dolphin	232,000	175,000	50,000	25,000	482,000
Heavy gunboat	216,000	175,000	100,000	25,000	516,000
Light gunboat	132,000	77,000	40,000	20,000	269,000

The total cost of the five vessels, one of each type, will be $3,498,000, and adding the cost of the two additional vessels of the last two types, the total cost of the seven vessels proposed by the Board, and aggregating 13,500 tons, will be $4,283,000.

The Board expresses the opinion that the limit of combined efficiency and economy is reached in the cruiser of the Chicago type, of 4,500 tons displacement, and it condemns any policy looking to the present construction of cruisers that shall rival in speed the fastest transatlantic steamers. The merchant steamers having this exceptionally high speed comprise less than one-hundredth part of the ocean steam-tonnage of the world, either in number or value, and most of them in the event of a war would be withdrawn from their ordinary pursuits. In order to match their speed it would be necessary to build vessels with a displacement of at least 11,000 tons; and while the great draft and dimensions of such vessels would confine their general efficiency within the narrowest limits, they would absorb for their maintenance and management an undue share of the current appropriations and of the existing allowance of seamen. Furthermore, the cost of building and fully equipping one such vessel would be at least $4,000,000, or nearly as much as that of all the seven ships recommended by the Board.

In the above opinion and recommendations the Department concurs. If, however, it should appear to Congress desirable to construct one vessel in which all other qualities shall be sacrificed to the attainment of the highest possible speed, and to provide for maintaining it in commission, the Department will gladly submit plans and estimates therefor, and the vessel when completed will no doubt add to the capabilities of the Navy. But the immediate object should be at moderate expense to replace our worn-out cruisers with modern con-

structions fitted for general service, and for this reason the reconstruction should for the present be continued on the lines already begun. In presenting the recommendations of the Board, the Department, in addition, advises the construction of one of the five steel rams recommended by the first Advisory Board, November 7, 1881, and by the report of last year; of one cruising torpedo-boat, at a cost of $38,000, advocated by the same Board, and by the present Board in its memorandum of November 21, 1882; and of two of the ten harbor torpedo-boats recommended by the first Board, of the kind asked for in the Ordnance report of this year.

The recommendations of the Board and the Department are believed to be in pursuance of a wise plan for that reconstruction of our naval force which all admit is, in some form and to some extent, indispensable to the national welfare. Such a plan should conform to the demands of our national policy. The scope of that policy, as it relates to the maintenance of a military establishment, has been clearly and ably outlined by the late President Garfield, and his judicious words may well serve as guides in any action that we may take to-day. In a speech made in 1878, in the House of Representatives, he said: "The men who created this Constitution also set it in operation, and developed their own idea of its character. That idea was unlike any other that then prevailed upon the earth. They made the general welfare of the people the great source and foundation of the common defense. In all nations of the old world the public defense was provided for by great standing armies, navies, and fortified posts, so that the nation might every moment be fully armed against danger from without or turbulence within. Our fathers said: 'Though we will use the taxing power to maintain a small Army and Navy, sufficient to keep alive the knowledge of war, yet the main reliance for our defense shall be the intelligence, culture, and skill of our people; a development of our own intellectual and material resources which will enable us to do everything that may be necessary to equip, clothe, and feed ourselves in time of war, and make ourselves intelligent, happy, and prosperous in peace.'"

With the views of American policy thus expressed the Department is in perfect accord. It is not now, and it never has been, a part of that policy to maintain a fleet able at any time to cope on equal terms with the foremost European armaments. The possibility of such war is not lost sight of; but with our isolated position, and traditional peace policy, it is a remote contingency, and we should cherish no ambition to take the lead among the naval powers of the world; certainly not until we again become foremost in the possession of a merchant marine. Any difference which would involve us in a conflict with one of the great powers should be the growth of time, affording opportunity for gradual preparation. On the other hand, in order to be prepared, not

merely by the potentiality of our immense resources but also by a actual armament, to assert at all times our natural, justifiable, an necessary ascendency in the affairs of the American hemisphere, w unquestionably need vessels in such numbers as fully to "keep alive th knowledge of war," and of such a kind that it shall be a knowledge c modern war; capable on brief notice of being expanded into invincibl squadrons. It is well known that we have not the elements of such force to-day. The condition of decrepitude into which the fleet ha fallen through a failure to provide for its gradual renewal by moder ships is justly a subject of ridicule at home and abroad. The vessel available for actual service are insufficient to give training to the officer and seamen, unequal to the present necessities of the Government, an unworthy of a great and prosperous maritime state.

The specific plan, which, in the opinion of the Department, should b adopted, looks to a gradual replacement of the present decaying flee by modern constructions. The proviso of the Act of March 3, 1883, limi ing the repair of wooden ships to 20 per cent of their cost, should b continued in force, in order that no money may be expended in rebuil ing worn-out structures of an obsolete type. Provision should then b made for building new cruisers, with due care and economy, by a annual outlay extending over a considerable period. At least seve modern vessels should be built in each year, until the Government has a quired a new steel Navy. Of the annual expenditure of four million which such a plan would require, from one-third to one-half can be save by abandoning attempts to rebuild the present wooden fleet, and b other wise retrenchments in the naval appropriations.

The first Advisory Board, in its report of November 7, 1881, gave a estimate of the required strength of a suitable unarmored cruising flee The report of this Board, composed of eminent naval officers, represent the highest professional opinion, and certainly these officers woul not underestimate the necessities of the Government. The standar adopted by them may therefore be safely regarded as a maximu for the naval force in time of peace. The report fixed the number c vessels required in commission at all times at forty-three, and the r serve at twenty-seven, making a total of seventy. To provide such force it recommended the construction of thirty-eight vessels. Furthe deterioration in the existing fleet since the report was made will nece sitate an increase in the number of new ships in order to obtain th force as established by the Board. As sufficient for that result, th Department would therefore advise the continuance of the polic recommended of building annually at least seven new ships, durin the next ten years, before the end of which period the country wi find itself possessed of a modern steel navy in every way adequate t the maintenance of the safety and honor of the nation.

PERSONNEL OF THE NAVY.

The Act of August 5, 1882, provided for a gradual reduction in the number of officers of the Navy, until a standard should be reached corresponding to the necessities of the service. This gradual reduction is now in progress, and should be allowed to continue. Its reversal or modification would result in keeping in the service a body of officers too large to be fully employed. No substantial departure from the policy of the Act can be defended on any sound principles of efficient and economical administration; it would be in the highest degree detrimental to the service, and injurious to the interests of the Government. The numbers established by the Act form in general the closest approximation to the requirements of the Navy, when the fleet shall be brought up to its full strength. This is clearly shown by a comparison between the maximum number of officers required for the fleet and the number which the Act leaves available for sea duty.

As the figures of the first Advisory Board may be assumed to give the maximum of ships needed, the full complement of those ships, with proportional reliefs, should give the maximum number of officers needed. A close estimate of this complement is readily made. The Board fixed the size of the fleet to be kept in commission at forty-three vessels. It recommended the construction of thirty-eight new ships, of four types. On January 1, 1883, there were in commission twenty-four steam-vessels of the first, second, and third rates, excluding the Alaska, which was laid up shortly after, and the Ashuelot, which was lost. By adding to these twenty-four ships in commission one-half of the thirty-eight proposed new ships, we obtain a sea-fleet of forty-three ships, the number laid down by the Board. The complement of the twenty-four existing vessels is shown by the list of January 1; the complement of nineteen of the proposed vessels may be determined from their size, according to the same standard. Such a calculation shows the number of officers required constantly at sea in the ships of the projected fleet to be as follows: Line officers, 365; medical officers, 83; pay officers, 43; engineer officers, 157.

The number of officers who will be available for sea duty under the reduced list of the Act of August 5 may be easily reached. It may be regarded as a general principle, and one which has reason and usage for its support, that under a fair assignment of duties, the three highest grades of officers, namely, rear-admirals, commodores, and captains, will pass at least one-third of their time at sea; commanders, lieutenant-commanders, and lieutenants, one-half; and lieutenants of the junior grade and ensigns, their whole time. In other words, in order to be reasonably occupied with the duties of their profession, one-third of the first class should be at sea, one-half of the second, and all of the third. Of the three principal staff corps, one-half of the medical inspectors, surgeons, and passed assistant surgeons, and of the

pay and engineer officers of corresponding grades, and all the ass surgeons, assistant paymasters, and assistant engineers, should sea. Upon such a basis, it will be found that the numbers fixed l Act of August 5 provide a force constantly available for sea as fol Line officers, 375; medical officers, 83; pay officers, 47; engineer of 100.

It is therefore beyond question that upon a liberal allotment of or residence on shore to officers, the reduced numbers are ample f maximum number of vessels to be at sea, as determined by the hi professional authority; while for the existing fleet they afford an ordinary surplus. An exception must be made in the case of the neer Corps, whose numbers were to be reduced 100 by the recen Reduction is needed here as elsewhere, but it might safely be li so as to correspond to that in the other branches of the service, result would be nearly effected by fixing the number of passed ass and assistant engineers at 150, instead of 100, making the reducti instead of 100. Against the reduction thus limited, no sound argu can be offered.

Under the most favorable circumstances, if the work of rebui new ships progresses steadily, it will be ten years before the max fleet is attained. As the personnel, under the reduced standa sufficient for such a fleet, it is more than sufficient for the present and, moreover, it has not yet fallen to the reduced standard. is therefore a double superfluity of officers; first, in the excess c reduced complement over the demands of the existing fleet, and ondly in the excess of the present list over the reduced comple In view of this excess, economy demands that the reduction shou made at once, instead of being postponed for the slow and gr operation of nature. Furthermore, as long as the excess rem promotion will be delayed, and deserving men will be compell wait for their advancement. Some measure should be adopt hasten the reduction. It is therefore recommended, first, that th be so amended as to cause the retirement of all officers at th of sixty-two years. As it now stands, no officer can be retired count of age until he has reached the grade of commander. If admirals, commodores, captains, and commanders should retire active service at sixty-two, much more should lieutenant-comma and lieutenants. Secondly, it is recommended, as a prompt and tical way of making the reduction prescribed by law, that a Boa appointed immediately, to be composed of nine officers of high ra the active or retired list, who shall scrutinize thoroughly the list cers in the several corps, and shall select therefrom the number by the Act of August 5, namely, 620 line officers from and incl the grade of rear-admiral to and including the grade of senior e 170 medical officers, 96 pay officers, and 220 engineer officers (thes being increased for the reasons already stated), to be retained o

sive list to discharge the current duties of the service, and to be entitled to their promotion after proper service and examination as vacancies occur, without reference to the officers not thus selected, who shall be considered supernumerary, and placed on a separate list, not entitled to promotion, and with leave-of-absence pay, but subject to be ordered to service with the proper pay of their grade in time of war, and who shall retire on reaching the age fixed by law, or may retire at any time before reaching that age on their own application. In order to secure the selection of the best officers in each corps, it may be advisable to authorize the choice to be made from the whole list of officers in that corps, disregarding the numbers now prescribed for the various grades, but conforming the final number for the corps to that fixed by law.

The immediate creation of the foregoing supernumerary list is imperatively demanded if the naval service is to be properly conducted. While the intelligence, correct principles and habits, and zeal and fitness for duty of the great mass of the corps of 1,410 commissioned naval officers, of whom 602 were, on August 1 last, at sea and 808 on shore, should be freely admitted, yet it may truthfully and properly be stated that a certain proportion of the officers in every grade are, for various reasons, not fitted for or likely to be ordered to the command of vessels or any other important duty. Their deficiencies are not so tangible as to afford grounds for excluding them from the service by courts-martial, and many of them manage to work through the examinations for promotion. Their number is not large, and it is certainly not desirable to exaggerate the evil as a means of correcting it. But such officers, whether few or many, are an incubus upon the establishment. They do no service, are an unnecessary public burden, and stand in the way of competent, faithful, and meritorious officers. They can be effectually reached only by the method proposed of selecting the number of officers actually needed for the service from the best in each corps, whereupon the worst will, without being named or stigmatized, drop out of sight by operation of law. The process of selection should be well guarded, but Congress should be earnestly urged to authorize its institution and thereby to ensure at once a much-needed improvement in the personnel of the Navy.

The recommendations of one year ago for allowing all promotions to the grade of rear-admiral to be made by selection from the commodores or captains, and for abolishing the grade of commodore by omitting to fill vacancies, are renewed; and it is also recommended that a fixed amount of sea-service in each grade should be required as a condition of promotion.

While the foregoing improvements and reforms concerning the personnel of the Navy should be insisted upon, there are some features of injustice which should at the same time be remedied. The present arrangement of the list is defective by reason of certain inequalities which bear hardly upon particular groups of officers, principally in the way of

delayed promotion. It is desirable that advancement either in pay o in rank shall go on by regular stages and never be unduly delayed If from any cause, as is now the case with one-half the vacancies promotion is stopped so that officers find themselves advancing t middle life without any corresponding advance in station, discourage ment and apathy follow, to the manifest injury of the service. Th groups of officers in reference to which a change is recommended ar the lieutenants, the ensigns of the junior grade, and the passed assistan engineers.

LIEUTENANTS.

By the Act of July 15, 1870, the lieutenant-commanders were reduce one hundred and the promotion of lieutenants was stopped until th reduction was effected. The head of the lieutenants' list, therefore remained stationary for over six years. In 1877 promotions were re sumed, but were again stopped by the Act of August 5, 1882, since whic only four have been made. The forty-five officers at the head of this lis have been nearly fourteen years in that grade, and under the present la few will be advanced in many years. It is therefore recommended tha the lieutenant-commanders be increased forty-five and the lieutenant reduced by the same number, to be immediately promoted, subject to th usual examination.

PASSED ASSISTANT ENGINEERS.

The case of the passed assistant engineers is one of peculiar hardship Nearly forty, who were in active service during the war, have been fro fifteen to seventeen years in their present grade, and since the first fiv years have received no increase of pay. In the present state of the lis they cannot look for promotion for several years. The Secretary of th Navy, in his annual report for 1881, called attention to their unfortu nate situation. A bill for their relief received a favorable report from th naval committees of both Houses at the first session of the Forty-seventh Congress, and in 1881 a similar bill passed the Senate but was not reache in the House. It is recommended that their pay be fixed, but not re troactively, after ten years from the date at which they took their presen rank, when at sea, at $2,450; on shore duty, at $2,250; on leave or wait ing orders, at $1,900; and after fifteen years from such date, when a sea, at $2,700; on shore duty, at $2,350; on leave or waiting orders, a $1,950.

JUNIOR ENSIGNS.

The status of junior ensigns also calls for the attention of Congress The lowest grade in the Army and in the Marine Corps, that of secon lieutenant, corresponds to that of ensign, and so does the lowest rela tive rank in the naval staff-corps. In the line exists the anomalou grade of junior ensign, in which officers must pass several year at the present rate of promotion. During this period, therefore, they

are junior to every other officer in their own service, and to the lowest commissioned officer in the Army. As graduates of the Academy are now appointed to the Engineer Corps and the Marine Corps as well as to the line, members of the same graduating class, who enter the more favored corps, obtain at once rank and pay above their comrades who enter the line. The Department therefore recommends the abolition of the rank of ensign of the junior grade; that commissions as ensigns be issued to the present officers of that rank; and that all graduates hereafter appointed to the line shall receive such commissions. It is further recommended that naval cadets who, after four years at the Academy, are serving for two years at sea prior to final graduation, be called midshipmen, but without other change in their status.

MATES.

Attention is also called to the position of the mates. The appointment of mates was a necessary measure during the war, by reason of the deficiency then existing in the junior grades of line officers. The necessity has now passed away; but the 38 mates still in the service form a deserving body of men, who should not be disturbed as they are approaching old age. It is recommended that legislation be adopted discontinuing the appointment of mates, but applying the provisions of naval retirement to those now in the service.

RESTORATION OF DISMISSED OFFICERS.

Congress should be earnestly requested not to restore to the Navy officers who have been dismissed for failures to pass their examinations for promotion, or for delinquencies established by trials before courts-martial. It may fairly be affirmed that more demoralization to the service has resulted from such restorations and from unwise remissions of sentences justly imposed than from all other causes. No officer should be upon the naval list, whom the head of the Department could not order to sea, as commanding or executive officer, without bringing upon himself severe censure in case of the loss of the ship. Yet this has been the status of most dismissed officers who have been restored. Lenient judgments and sympathy for officers who have been authoritatively condemned and dismissed should not be allowed to operate to again place the delinquents where they must either be supported as pensioners, while they continue a reproach to the service and an obstacle to the promotion of their faultless comrades, or else be sent to sea to the great peril of the ships of the Navy and of the lives of those on board. These remarks apply with especial force to cases of dismissal for drunkenness. To place or retain officers with such habits as life-burdens upon the people is a grievous public wrong.

ORGANIZATION OF THE DEPARTMENT.

It is a fundamental principle of our Republic that "in all cases at all times the military ought to be under strict subordination to governed by the civil power." This subordination is effected thro the execution of the laws of Congress concerning the Army and N by the President, who is its constitutional commander-in-chief, and exercises his control through Secretaries from civil life. These, h ever, are encompassed, the one by 2,129 Army officers, annually exp ing from thirty to fifty millions, and the other by 1,410 naval offic expending from fifteen to twenty millions. The chiefs of the bure necessary for departmental organization must be officers; and in War Department they hold their bureau positions during life. enforce absolutely civilian control and represent popular ideas in s great military establishments requires constant watchfulness and e from the Secretaries. But no Secretary can maintain the requi physical and mental power and endurance with the assistance thi afforded under the present departmental organizations, in which only civilian aids are the clerks, who in the course of years cease t an adequate counterpoise to the military element. No Secretar War or of the Navy ought, therefore, to be allowed by Congres undertake his duties without at least an assistant secretary an solicitor, called directly from civil life, and paid liberal salaries. these two Secretaries, who are expected to enforce every econom or administrative measure which Congress may enact, are not furnis additional civilian aids, it might be better to abolish the secretarysh cease to interpose citizen officers to represent the President in his stitutional command, and give full control of all details to the Gen and Admiral. But instead of thus formally or in effect abandoning true traditional theory as to the management by the people and P dent of their Army and Navy, Congress should rather take steps to enforce the civilian Secretaries by giving them the ablest possible as ants in their important labors.

NAVY-YARDS.

The Navy-Yard Commission, appointed October 9, 1882, by direc of Congress, consisting of Commodore S. B. Luce, Chief-Engineer Cha H. Loring, and A. B. Mullett, esq., civilian member, have made a re dated December 1, 1883, which will be transmitted to Congress; careful attention should be invited to the facts, opinions, and recomm dations therein submitted.

By request from the Department, the Commission, on the 6th of J and on the 11th of October, furnished for immediate action statem of their specific recommendations, most of which have been adopte the Department. They advise a reorganization and concentratio

the mechanical departments of those yards which may be kept open for the construction or repair of vessels, so that there shall be but one shop in each for the performance of any one class of work, and that each of the several articles that form a part of the outfit of a ship shall be made in one yard only.

Concurrently with the foregoing improvements in general administration, they recommend that the New York, Norfolk, and Mare Island yards be kept in use as working yards; and that the Washington yard be retained for the manufacture of standard articles, but not as a ship-yard for the repair of vessels.

They recommend that the New London yard be closed, and that the Naval Asylum at Philadelphia be transferred to the vacated site on the Thames. The Department has accordingly closed this yard, and advises that, if the Naval Asylum is not thus moved, the New London navy-yard be returned to the State of Connecticut, as not likely to be needed for any purpose of the national Government.

The Commission recommend that the Pensacola yard be closed, and this has been done. The doubt as to the defensibility of this yard leads to their recommendation that a commission be appointed to determine at what place in the Gulf of Mexico a naval station should be located. This recommendation is approved by the Department.

The members of the Commission differ as to the Boston yard. Two think that it should not be used as a construction and repair yard in time of peace, but all agree that the ropewalk and sailmakers' shop should be continued in operation, and that the yard should not be sold, but kept for use in time of war. Work upon the construction and repair of vessels has therefore been suspended. In view of the great value of the ground occupied by this yard in the heart of Boston, it is worthy of serious consideration whether it should not be sold.

The Commission also differ as to the present disposition of the Portsmouth yard; one member believing that it should be kept open as a sanitary station and for the repair of wooden ships, but all agreeing that no permanent improvements should be made. Repairs of wooden vessels have been continued for the present, and when the yard ceases to be used as a naval workshop it can wisely be kept for a supply station and arsenal, as the land which it includes would only sell for a small price.

The Commission recommend that the League Island yard "be closed both as a yard and as a naval station until plans have been prepared and approved for such a yard as the Department requested authority to construct and Congress authorized, and until the filling, the construction of the quay walls and the gateways to the great ship-basin in the back channel are completed," but they consider the site too valuable and desirable to be abandoned, and therefore recommend its completion on the original basis; yet they say that it is totally unfit for an ordi-

nary or small yard, and that if the original plan is to be abandoned th Island should be also. The yard has therefore been closed.

The surface of League Island varies from one to three feet belo high-water mark, and the yard will embrace 567 acres of land and 35 acres of water. An estimate of the expenditures which will be require according to the original plans reaches a total of $60,695,103.80. Th views of the Commission therefore do not seem to be sound. If th League Island yard cannot be made efficient without so large an e penditure, it should be promptly given back to the city of Philade phia; and if a navy-yard is required on the Delaware River, a site moderate area should be found on higher and healthier ground.

While the general views of the commission are deserving of candi consideration, yet it must be remarked that their ideas are large an not likely to be soon realized. They assume that the United State will maintain a great and powerful navy, and consequently will nee many expensive docks, dockyards, and marine engine shops. Such ha not been our policy; and will not be even when our merchant marin is revived and we again become a maritime nation. At all events, unt then we shall require only moderate squadrons, and these, althoug they should be composed of the best modern ships, can be built an maintained without our hastening to make heavy expenditures for doc yards. We can afford to take full time to consider and determine d liberately our policy as to the number of our naval vessels and the be method of constructing and repairing them, if, in the mean time w close such repair shops as are not needed and check extravagance i those which are still used.

Much difficulty has been experienced in effecting navy-yard reform owing to the opposition of persons interested in the existing syste not only to closing the repair shops in yards to be hereafter kept onl as naval stations and arsenals, but also to concentration and econo at yards which are to be kept open for work. The assistance and sp cific directions of Congress should therefore be sought and effectivel accorded. The arguments and facts which show that reforms shoul be instituted are overwhelming. The change of naval constructio from wooden to steel ships would of itself involve a revolution i methods of work. With but little more than thirty vessels in commi sion, only five or six have required repairs at any one time, and b distributing these among as many navy-yards, the cumbrous organiz tion and heavy expenditures at each yard have been hung upon an charged to the one ship then in hand with the results which publishe records have shown.

In the report of last year was submitted an exhibit showing the forc employed at the navy-yards on the 16th day of November, 1882, wit the compensation paid the employees and workmen on that day, an

the work then in progress on ships-of-war. A similar exhibit for November 16, 1883, is as follows:

Navy-yards.	Commissioned and warrant officers.	Enlisted men and marines.	Employees other than ordinary mechanics and workingmen.		All other employees.		Total employees.		Work in progress on ships-of-war.
	No.	No.	No.	Pay-roll Nov. 16.	No.	Pay-roll Nov. 16.	No.	Pay-roll Nov. 16.	
Portsmouth	22	82	61	$219 36	481	$1,213 69	542	$1,433 05	Repairing Omaha and Marion.
Boston	48	279	71	262 63	303	725 92	374	988 55	Repairing Shenandoah.
New York	72	444	124	405 17	758	2,006 57	882	2,411 74	Repairing Galena, Yantic, Alliance, and Vandalia.
League Island.	43	164	71	252 84	506	1,305 12	577	1,557 96	Repairing Ossipee.
Washington	41	161	86	269 00	485	985 03	571	1,254 03	Making anchors, chains, and sails for Ossipee and boilers for Marion and New York.
Norfolk	40	286	99	284 41	471	925 90	570	1,210 31	Making boilers for Vandalia and Alliance.
Pensacola	7	27	8	25 23	44	83 98	52	109 21	None.
Mare Island	34	234	73	322 11	711	2,310 28	784	2,632 39	Repairing Monongahela and Mohican.
Total at all yards.	307	1,677	593	2,040 75	3,759	9,556 49	4,352	11,597 24	

The question whether all the steel naval vessels of the future shall be constructed by contract, or some of them by contract and some in the navy-yards, it is not necessary immediately to determine. Assuming that the hulls of such ships might be judiciously and economically built in the yards, it is doubtful whether the machinery will ever be so constructed. All the engines for the British navy are built in private shops. But conceding that, wherever the ships may be originally built, it is desirable for the Government to possess shops fitted for such repairs as may from time to time be found necessary, it is due to truth to declare that the Government repair shops under the present system ought not to be intrusted with them.

These establishments must first be thoroughly reorganized in such a way as to exclude all political considerations from their management, otherwise bad and expensive work will be the result. We cannot afford to destroy the speed of our naval engines in order to make votes for a political party. Whatever other governmental agency may be conducted with partisanship, a great naval workshop, dealing with the hull of a modern steel steamship, its fittings and equipment, and with the complexities of its machinery, cannot be successfully so managed. No charge of favoring private ship-building establishments should deter any one from asserting that, until the navy-yard workshops are managed on business principles and without regard to politics, the construction and repair of the new American Navy should be committed to those

builders who employ or discharge their foremen and all their artisans according to their skill as mechanics and without caring for their political opinions or votes.

SALES OF CONDEMNED SHIPS, STORES, AND SUPPLIES.

In pursuance of the act of Congress of August 5, 1882, and of reports of the inspection boards, made as therein directed, the following condemned vessels have been stricken from the Navy Register: Congress, Guard, Plymouth, Kansas, Emerald, Massachusetts, Sabine, Connecticut, Iowa, Niagara, Oregon, Ohio, Pennsylvania, Virginia, Florida, Blue Light, New Orleans, Colossus, Java, Susquehanna, Glance, Burlington, Supply, Sorrel, Antietam, Dictator, Frolic, Relief, Pawnee, Rose, Benicia, Nyack, Saco, Old Monadnock, Narragansett, Tuscarora, Alaska, Worcester, Canandaigua, Jean Sands, Shawmut, Savannah, Santee, Phlox, Wyoming, Roanoke.

Of these vessels, the Wyoming, Antietam, Supply, Emerald, Santee, Phlox, Jean Sands, and Rose have been reserved for purposes for which they can be made useful, or for future sale. The Massachusetts, Connecticut, Oregon, Pennsylvania, Virginia, Colossus, Java, and Canandaigua, all except the last being uncompleted at the navy-yards, will doubtless be there taken to pieces, as they cannot be advantageously sold. The remaining twenty-seven vessels, excluding the Florida, Pawnee, and Benicia, for which no bids were made, have been sold to the highest bidders, in accordance with the statute. Their appraised value was $330,100, and they sold for $384,753, an advance of $54,65 over the appraisement.

Sales at public auction of condemned stores and supplies have also been made at the navy-yards under the provisions of the second section of the act, amounting to about $138,000.

MOVEMENTS OF VESSELS.

The force on the *North Atlantic Station* remains under the command of Rear-Admiral George H. Cooper, and consists of the flagship Tennessee, the Vandalia, Swatara, Alliance, and Yantic. The Kearsarge was transferred to the European station May 31. All except the Yantic made cruises during the year to the West Indies. The Flagship made a special visit to Venezuela, and the admiral and other officers participated in the ceremonies at Caracas connected with the unveiling of the statue of Washington during the Bolivar Centennial. Their presence was highly appreciated by the Government and people of Venezuela. The Tennessee also took part with other vessels in the ceremonies attending the opening of the Brooklyn Bridge May 24, and in the Centennial celebrations at Newburgh October 18, and New York City, November 26. The Vandalia, Swatara, and Alliance each made a cruise along the fishing banks, and the Swatara is now a

Port au Prince, Hayti, and the Alliance on the way thither. The Yantic, on her return May 22 to the Brooklyn navy-yard from cruising in the Gulf and along our South Atlantic coast, was on June 13 dispatched to the coast of Greenland as a tender to the steamer Proteus, containing the relief party, under Lieut. E. A. Garlington, sent by the Chief Signal Officer of the Army to endeavor to bring back the exploring party under Lieut. A. W. Greely, at Lady Franklin Bay. The Yantic visited Disco, Upernavik, and Littleton Island, and returned to New York September 29, having taken on board at Upernavik Lieut. Garlington and party and also the officers and crew of the Proteus, which had been crushed in the ice July 23, near Cape Sabine; but bringing no tidings of the Greely expedition.

The *South Atlantic Station* is now under the command of Commodore Thomas S. Phelps, who relieved Capt. Aaron W. Weaver, temporarily in command, the former commanding officer, Rear-Admiral Peirce Crosby, having been transferred to the Asiatic station. The force now comprises the Brooklyn (flagship), and the Nipsic. The Galena returned to New York September 3, and was put out of commission. The limits of this station have been extended beyond the Cape of Good Hope to 70° east longitude, and as far north in that quarter as the equator. The flagship is now on a cruise to the coasts of Madagascar, the Comorro and other islands, to ports on the east coast of Africa as far north as Zanzibar and to the island of St. Helena. The Nipsic arrived at Rio de Janeiro August 10 from New York, and at last advices was at Montevideo.

The *European Station* is now commanded by Rear-Admiral Charles H. Baldwin, who relieved Rear-Admiral J. W. A. Nicholson on the 10th of March, 1883. The ships are the Lancaster (flagship), and the Quinnebaug and Kearsarge, the last having taken the place of the Nipsic. The Lancaster, under instructions from the Department, proceeded on the 17th of April, 1883, from Havre, France, to Cronstadt, Russia, and Rear-Admiral Baldwin and staff were present at the coronation of the Emperor at Moscow. The Quinnebaug was employed on the coast of Africa from January to August, and the Kearsarge, which joined the station in September, has sailed for the coast of Morocco.

The *Pacific Station*, under the command of Rear-Admiral A. K. Hughes, who relieved Rear-Admiral George B. Balch, now has within its limits the following named vessels: The Hartford, (flagship), Lackawanna, Iroquois, Wachusett, Adams, and the store-ship Onward. The former flagship, the Pensacola, was detached in June under orders to return to the United States by way of Honolulu, Japan, China, and Cape Town, Africa. The Hartford, before she became the flagship, made a cruise to Caroline Island, carrying a party of observers of the solar eclipse, sent by the National Academy of Sciences; and has since cruised along the Central American coast, and is now on the way to Callao. The other vessels, excepting the Adams, which continues

at Sitka, Alaska, have made cruises along the west coast of South America. The Lackawanna and Wachusett were present at Honolulu during the coronation ceremonies of the King of Hawaii, February 12, 1883.

The force on the *Asiatic Station*, which last year consisted of the Richmond (flagship), Ashuelot, Monocacy, and Palos has been increased by the Juniata, Enterprise, and Essex, and reduced by the loss of the Ashuelot, February 18, 1883, upon Lamock Island. Rear-Admiral J. M. B. Clitz was relieved, April 21, by Rear-Admiral Peirce Crosby, and the last-named officer having been placed on the retired list October 29, 1883, at his request, in accordance with the provisions of law, Commodore John Lee Davis has been ordered to take command of the Station, and left San Francisco November 22 for that purpose. The vessels have visited the important ports in China, Japan, and Corea. The Enterprise, on the way from the United States to join the Station by the Cape of Good Hope, visited various ports and islands on the east coast of Africa; and the Juniata, proceeding by the Suez Canal, touched at points in Egypt, Arabia, Persia, and India. The Trenton, with the Corean Embassy on board, sailed November 29 to join this station.

The *Apprentice Training Squadron* continues under the command of Commodore S. B. Luce. The vessels are the New Hampshire (flagship), Minnesota (gunnery ship), and the sailing ships Saratoga, Portsmouth, and Jamestown. The Saratoga made a cruise to Lisbon, and after her return to New York participated, in company with the Portsmouth, in the Centennial celebration at Newburgh. The Portsmouth cruised in the West Indies and along the Atlantic coast of the United States. The Jamestown cruised in the West Indies, and afterwards made a cruise to Lisbon.

The vessels employed on SPECIAL SERVICE are the Powhatan, which has cruised in the West Indies and along the Spanish Main, and later to the fishing banks; the Michigan, on Lake Erie; the Ranger, surveying the Mexican and Central American coasts; and the Despatch and Tallapoosa.

THE JEANNETTE EXPEDITION.

In pursuance of a resolution of Congress, approved August 8, 1882, a court of inquiry concerning the loss in the Arctic seas of the exploring steamer Jeannette was convened, composed of Commodore William G. Temple, president; Captain Joseph N. Miller and Commander Frederick V. McNair, members, and Master Samuel C. Lemly, judge advocate, which met October 5, 1882, and on February 17, 1883, the record of its proceedings and findings was submitted. The conclusions reached by the court were to the effect that the condition of the Jeannette on her departure was good; that her management was marked by judgment and prudence; that she was crushed by a pressure of ice that would have annihilated any vessel; that the contingency of the loss of the vessel had been provided for, and that the plans adopted upon leav-

ing the wreck were judicious; that proper efforts were made by the various officers to ensure the safety of the parties under their immediate charge, and that everything possible was done for the relief of the other parties; and that after the separation of the three boats on September 12 there is no further record of Lieutenant Chipp's party.

The court also found that there was no occasion to impute censure to any one connected with the vessel, and that "the general conduct of the personnel of the expedition seems to have been a marvel of cheerfulness, good fellowship, and mutual forbearance, while the constancy and endurance with which they met the hardships and dangers that beset them entitle them to great praise;" also that special commendation is due to Lieutenant-Commander DeLong for the high qualities displayed by him in the conduct of the expedition; to Chief Engineer Melville for his zeal, energy, and professional aptitude, which elicited high encomiums from his commander, and for his subsequent efforts in the Lena Delta; and to Seamen Nindemann and Sweetman for services which induced their commander to recommend them for medals of honor. The court, having adjourned February 12, was reconvened March 30 for the examination of those survivors of the expedition who had in the mean time returned from Siberia, and submitted a final finding on April 23, to the effect that no modification was requisite in the conclusions previously reported. The findings were approved by the Department.

Lieut. Giles B. Harber and Lieut. W. H. Schuetze were ordered by the Department on February 2, 1882, to proceed to Siberia and prosecute the search for the missing officers and men of the Jeannette. They arrived at Irkutsk on March 25, and, after fruitless efforts to obtain a suitable steamer, proceeded in boats to Yakutsk, and thence to the Lena Delta, arriving at Bulun July 3. From this time until October 31 the party was engaged in making a careful search of the Lena Delta and of the adjacent coast as far as Olenek on the west and the Jana River on the east, a distance of over one thousand miles. Every part of the coast was thoroughly explored, and every effort made by personal inspection and by questioning the natives to find traces of the lost party, but without success.

By the Act approved August 7, 1882, Congress made an appropriation of $25,000 to defray the expenses of removing and transporting to the United States the remains of Lieutenant-Commander George W. DeLong and his companions, eleven in all, and for their proper burial within the United States. Upon the same day instructions were sent by cable to St. Petersburg, to be forwarded thence to Lieutenant Harber, charging him with the execution of this duty. Being at that time occupied with the search in the Lena Delta, he only received the instructions upon his return to Yakutsk, November 29. The necessary permission from the Russian authorities was received at Yakutsk January 25, 1883. On the day following, Lieutenant Harber left Yakutsk for the Lena

Delta, and using all possible dispatch, returned with the remains on March 29. As the winter season was nearly over, during which alone the removal to Orenburg, the nearest railway point, could be effected, arrangements were made by Lieutenant Harber to remain at Yakutsk until the following season. As soon as winter travel is practicable, the bodies will be transported to Orenburg, and thence to the United States.

BUREAU REPORTS.

The reports of the chiefs of the Bureaus of the Department attest the intelligence and zeal with which all are laboring for the good management of the Department and the improvement of the naval service. Criticisms have at times been freely made of the bureau system, which upon consideration seem unfounded. All methods of subdivision of labor have their defects, but such, however, are indispensable in every large governmental or civil establishment. It may fairly be claimed that the organization of this Department into Bureaus whose chiefs represent and act only in the name of the principal head, as he in turn only executes the orders of the President as to all matters connected with the naval establishment, is the best that can be devised. Advisory Boards, whether organized by direction of law or on the motion of the Department, are unobjectionable so long as their functions are limited to giving advice or negativing injurious action. But attempts to vest in them affirmative executive power, or to establish a Board of Admiralty to govern the Navy, would tend to destroy unity and vigor of action and would be no improvement upon the organization by Bureaus.

BUREAU OF YARDS AND DOCKS.

The recommendations of the Chief of the Bureau of Yards and Docks, Rear-Admiral Edward T. Nichols, for appropriations amounting to $2,208,500 for the permanent improvement of the navy-yards and stations, although printed for information with the estimates, have not been formally submitted by the Department, for the reason that before making further appropriations for such permanent improvements, Congress should adopt a definite and complete plan, determining what yards shall be closed as working yards and what yards shall continue to be used for construction and repair, and how the latter shall be improved. In addition it has been stated earlier in this report that radical changes in methods of work in the construction and repair of vessels should be instituted if efficient and economical results are to be secured. These changes also should precede any large appropriations for permanent improvements.

The above views do not, however, justify the reductions made at the last session of Congress in the appropriations for the general maintenance and preservation of the yards. If any yard is to be closed it should be done by direct requirement of Congress, and not indirectly

by an arbitrary reduction of the appropriation for fuel, lights, watchmen, fire-enginemen, and other requisites for the preservation of the valuable property of the Government, which must be reasonably provided for, even at closed yards.

The recommendation of the last report for the sale of 53 of the 193 acres of the New York navy-yard, which was adopted by the House of Representatives, is renewed, and the sale of the naval hospital grounds should be included.

BUREAU OF EQUIPMENT AND RECRUITING.

The report of Commodore Earl English, Chief of the Bureau of Equipment and Recruiting, states the equipments of vessels which have been prepared, the coal purchases made, the hemp, hide, and wire rope, chain cables and anchors, galleys and ranges manufactured, and the enlistment of 5,064 of the 6,640 seamen of the Navy, effected during the year by the Bureau. It also recites the progress made in preparing Coaster's Harbor Island, in Narragansett Bay, for the headquarters of the training squadron for the naval apprentices, and advises an increase of the number of apprentices allowed by law from 750 to 1,000; which recommendation is concurred in.

BUREAU OF NAVIGATION.

The Chief of the Bureau of Navigation, Commodore John G. Walker, describes the operations of his Bureau and of the offices connected therewith, in relation to the improvement and testing of Navy compasses; the determination of longitudes, under Commander Francis M. Green, continued by Lieutenant-Commander Charles H. Davis; navigation supplies; the Naval Observatory; the hydrographic work of the Navy; the transit of Venus observations; and the Nautical Almanac.

The report recommends the erection of an inexpensive building, of non-magnetic materials, in which to test the compasses for the Navy. The necessity for such a building is now urgent, in view of the construction of steel cruisers, and of the prospective completion of the monitors.

Attention is again called to the importance of urging upon Congress the adoption of the revised International Regulations for preventing collisions at sea, thereby removing the confusion that now exists in consequence of the difference between the regulations of all other maritime nations and our own, which is likely at any time to cause a heavy loss of life and property.

NAVAL OBSERVATORY.

The Naval Observatory, since May 1, has been under the superintendence of Rear-Admiral Robert W. Shufeldt. His report treats in detail of the work performed during the past year with the several instruments; of the addition of a temperature room, for the more perfect testing of chronometers; of the examination and testing of other nauti-

cal instruments issued to the vessels of the Navy; of the transmission of time-signals; and of the reduction of the observations made by the astronomical expedition to Chili, and by the parties organized under the transit of Venus commission.

The report calls attention to the delays in the publication of the annual volume of "Astronomical and meteorological observations" caused by the lack of funds, and recommends a specific appropriation for printing the Observatory publications.

It is further recommended that provision be made for the appointment of a board of visitors, composed of a limited number of eminent astronomers, to examine annually into the condition of the Observatory, and advise with the superintendent upon the character of the work to be done, thereby removing many of the objections that are now urged against the administration of the institution. The Department concurs in the above suggestions, and it renews the recommendation made a year ago, that appropriation be made for the construction of the new observatory authorized by Act of Congress of February 4, 1880, for which, at a cost of $63,000, a new site has been already purchased.

HYDROGRAPHIC OFFICE.

The officer in charge of the Hydrographic Office, Commander John R. Bartlett, narrates the work of the office in the preparation, correction, and issue of charts and sailing directions; the distribution of maritime information; the reduction of surveys made by naval officers in foreign waters, and the drawing, engraving, and printing of charts therefrom; the examination of the physical features of the ocean; and the collection and arrangement of meteorological information, obtained from naval and merchant vessels, for the construction of wind and current charts.

To meet the wants of the mercantile community, and to make information available at the earliest date, steps have been taken to issue a weekly pilot chart of the North Atlantic Ocean, containing the prevailing winds, currents, and reported dangers to navigation. A further improvement has been made by the detail of officers to represent the Hydrographic Office at the principal commercial ports, thereby making the information which it is the business of the office to distribute more accessible to shipmasters and others who need it, and enlarging the facilities of the office for collecting maritime information.

PUBLICATION OF THE NAVAL WAR RECORDS.

The naval records of the war, although not so voluminous as those of the Army, are equally important and valuable. It is desirable that provision should be made for continuing the work which has been already begun, of preparing these records for publication, and upon which, in the absence of such provision, no substantial progress can be made. It is especially important that steps should be taken without

delay to collect confederate documents which have passed into private hands, and which are likely in a short time to be lost or destroyed, by employing an agent for the purpose, as has been done with advantage by the War Department. It is therefore recommended that an appropriation be made at the coming session for the employment of a sufficient clerical force in connection with this work and of an agent for the collection of confederate documents.

OFFICE OF NAVAL INTELLIGENCE.

In order that the Department may be supplied with the fullest and most accurate information as to the progress of naval science in this and other countries, and the condition and resources of foreign navies, an Office of Naval Intelligence has been established for the collection and classification of such information, and for its publication, as far as may be advantageous and suitable. Two series of valuable reports or papers have been prepared by the office. Of the first or "War Series," giving accurate technical descriptions of naval operations in recent wars, there have been published one on the war between France and Tunis in 1881, and another on the South American war in 1879–1881; and a third, on the operations in Egypt in 1882, is in course of publication. The second series is devoted to general professional information. Of this there have been published an account of observations upon the Korean coast and in Siberia, and a report on the English Electrical Exhibition of 1882.

BUREAU OF ORDNANCE.

The Chief of the Bureau of Ordnance, Commodore Montgomery Sicard, recommends increased appropriations for the next fiscal year, and reports the progress made in preparing experimental high-power guns on both the hooped and the wire-wound systems; in improvements in powder for such guns; in gun-carriages; experiments upon armor plates with new steel projectiles; purchases of Hotchkiss revolving cannon and experiments with Gatling guns; the construction of gun-cotton spar-torpedoes, the manufacture of gun-cotton, the purchase of electric search-lights, and the instruction of naval officers in torpedo practice at the station at Newport, R. I., under the supervision of Captain Thomas O. Selfridge.

Difficulty has been experienced in procuring in this country steel forgings suitable for the large guns of the new cruisers and the monitor Miantonomoh. Opportunity has been given to all home manufacturers to furnish such forgings; some are being thus supplied, and some orders have been placed in England. It is the intention of the Department to have in readiness the batteries by the time of the completion of the vessels, and for this purpose to make such purchases abroad as may be necessary.

In pursuance of the directions of the Naval Appropriation Act of March 3, 1883, the President, on April 2, 1883, appointed Commodore

Edward Simpson, U. S. Navy; Capt. Edmund O. Matthews, U. S. Navy Col. Thomas G. Baylor, Ordnance Department, U. S. Army; Lieut. Col Henry L. Abbot, Engineer Corps, U. S. Army; Maj. Samuel S. Elder Second Artillery, U. S. Army; and Lieut. William H. Jaques, U. S Navy, a Board for the purpose of examining and reporting to Congres which of the navy-yards or arsenals owned by the Government has th best location and is best adapted for the establishment of a Govern ment foundry; or what other method, if any, should be adopted for th manufacture of heavy ordnance adapted to modern warfare, for the us of the Army and Navy of the United States; and the cost of all buildings tools, and implements necessary to be used in the manufacture thereof including the cost of a steam-hammer or apparatus of sufficient size fo the manufacture of the heaviest guns. The Gun Foundry Board ha been diligently prosecuting its work, and has visited Europe for th purpose of fully observing foreign methods of producing heavy guns Its report may be expected at an early date. In some form the Gov ernment should aid in providing the means of manufacturing in thi country modern high-power cannon of such a character and in such numbers that we shall be to no extent dependent upon purchases i other countries.

BUREAUS OF CONSTRUCTION AND REPAIR AND OF STEAM ENGINEERING.

Chief Constructor Theodore D. Wilson, and the Acting Chief of th Bureau of Steam Engineering, Mr. William H. H. Smith, in their re ports submit the estimates for the next fiscal year, including those fo completing the new cruisers and the double-turreted monitors, and report the work upon the repairs of the hulls and machinery of vessels during the last year, and the present condition of the fleet. Both these officers discuss at length questions concerning the personnel of th respective corps, and also consider the recommendations of the Navy yard Commission for the concentration of the work in the navy-yards differing widely upon the last subject.

The views of the Chief Constructor are forcibly expressed and en titled to full examination. It is, however, beyond dispute that methods of naval construction must change with the transition from wooden t steel vessels. It will be found impossible for two independent and equal bureau chiefs to design and supervise the construction of a modern vessel, the one that of the hull, and the other that of the machinery, and bring all parts together in one perfect ship, without differences of opinion which cannot longer be safely decided by a com mon superior who does not possess technical skill. The true solution of the conflict is to unite these two bureaus as a single Bureau of Naval Construction, having for its chief the most competent naval architect that can be found, whether among the present officers of the Navy or in civil life.

BUREAU OF PROVISIONS AND CLOTHING.

By the report of Paymaster-General Joseph A. Smith, it appears that during the fiscal year the cost of the rations actually issued to crews and marines on board ships has been $473,476.08, while the payments in money to crews, marines, and officers for commuted rations have been $576,477.06, and that the proportion of such payments is increasing yearly. Commutation for enlisted men, although of doubtful legal authority, and only effected through the fiction by which the man is supposed to draw his rations and then sell them to the paymaster, has become practically unlimited, and results in the deterioration and final condemnation of many provisions. Authority of law is requested for the commutation of rations, to be limited and regulated by the Department.

Improvements in the quality of clothing for seamen have been effected under the present system of manufacture at the New York yard, and a reduction in the cost is contemplated by the Bureau. The Bureau is of opinion that the navy ration cannot be materially changed in quantity or quality unless its value shall be increased by Congress. This subject deserves consideration by an appropriate Board.

The law of March 3, 1881, regulating the purchase of tobacco, is objectionable, fixing arbitrarily, as it does, the time of purchase, requiring expensive advertising, the procuring of unnecessarily large quantities to deteriorate by storing, and otherwise taking away that reasonable discretion which should be vested in the Bureau. It should be repealed, and section 3721 of the Revised Statutes should be re-enacted.

BUREAU OF MEDICINE AND SURGERY.

The Surgeon-General, Medical Director Philip S. Wales, reports upon the health of the Navy, the physical examination of recruits, and the condition of the Naval Hospital Fund; calls attention to improvements in the method of obtaining supplies, in the dissemination of professional information to medical officers, and in the statistical reports showing the duration, variety, and distribution of disease in the naval force; and advises that increase be made in the appropriation for the repair and maintenance of hospitals, and for the employment of attendants, if the present system is to continue.

The report, however, states that the system is defective in that the hospitals are too large and expensive for present or prospective requirements, and it recommends the sale of those at Chelsea, Mass., Brooklyn, N. Y., and Philadelphia, Pa., the proceeds to be turned into the Naval Hospital Fund, from which the money was drawn to make the original purchases; the employment of the hospital at Washington for the purposes of the Museum of Hygiene; the erection of station hospitals of suitable size at the navy-yards, for acute cases of disease and those likely to be of brief duration; and the maintenance of the estab-

lishment at Norfolk, Va., as a general hospital for chronic and protracte cases, the naval laboratory being removed from Brooklyn to that plac The effect of this measure would be the substitution of one hospit fully equipped and occupied for seven that are now inadequately su ported and only partially used. The hospital at Mare Island woul necessarily be retained, as it is the only station on the Pacific coast.

MARINE CORPS.

Col. C. G. McCawley, commanding the Marine Corps, reports that hi command is in an excellent state of efficiency and discipline; havin October 1, 1883, 1,887 enlisted men; 883 on board ships in commission an 1,004 at shore stations. Appropriations should be made this year fo the whole number of thirty second-lieutenants now authorized by law the eight new appointees to come, as last year, from graduates of th Naval Academy. The size, character, and relations to the militar establishment of the Marine Corps require that its commanding office should be given the former rank of brigadier-general by a revival c section 1601 of the Revised Statutes.

NAVAL ACADEMY.

The condition of the Naval Academy is every way satisfactory. Th discipline is strict but salutary and meets no resistance. The cours of instruction and standard of scholarship are calculated to produc the most desirable results. The reports of the Board of Visitors c June 9, 1883, and of Capt. Francis M. Ramsay, Superintendent, ar commended to the attention of all interested in the institution.

Of the naval cadets who completed their six years' course and finall graduated in June, 1883, the three highest were appointed assistan naval constructors and sent abroad for further instruction, and twent others, selected in the order of merit, as required by the Act of Augus 5, 1882 were appointed in the lower grades of the line and Enginee Corps, and of the Marine Corps; seven as ensigns; three as assistan engineers, and ten as second-lieutenants in the Marine Corps. The re maining sixty-three, being surplus graduates, according to the act, wer given each a certificate of graduation, an honorable discharge, and on year's sea pay, as therein directed.

Of the surplus graduates forty-one had been cadet-midshipmen an twenty-two cadet-engineers before the Act of August 5 changed thei designation to naval cadets. The cadet-engineers claimed that at tha date they were not undergraduates at the Academy, but were a perma nent corps in the service, entitled to be retained therein at the end c their six years' course, notwithstanding the Act. They founded thei claim upon some immaterial differences of language in the appropriatio acts concerning the cadet-engineers and cadet-midshipmen. The opin ion of the Department, however, was clear that both were in law an

fact undergraduates at the Academy and nothing more, until the end of their six years; and that the intention of Congress was plain to dismiss both as surplus graduates, and not to discharge the forty-one and retain the twenty-two, and therefore the claim of the latter was disregarded, and all were alike discharged. If the claim is persisted in, Congress should negative it by a new enactment. Equitably, if the twenty-two engineers have any claim the forty-one cadet-midshipmen have the same. But notwithstanding they may all be entitled to sympathy in their personal disappointment at not being required, as they expected, to serve the Government, there will be no justification for placing them for life upon a naval register already overcrowded with unemployed officers. The first annual pay of these sixty-three graduates, and of an equal number next year, if unnecessarily admitted to the Navy, would be about $160,000; to continue and the pay of each to increase during life.

REPORT OF THE ADMIRAL OF THE NAVY.

The report of the Admiral discusses with freedom and force a large range of naval subjects, his views upon which are commended to full attention.

NAVAL EXPENDITURES.

The appropriations applicable to the current expenses of the fiscal year ending June 30, 1883, were, as stated in the last annual report, $15,575,858.98. From this sum should be deducted, as there explained, $59,813 belonging to the Naval Asylum, and there should be added a balance on hand at the beginning of the year of $1,814,532.57, on account of pay of the Navy and pay of the Marine Corps. The total gross amount, therefore, which was available for the year was $17,330,578.55, still subject to a deduction of $931,137.49, due to general account of advances, and of $13.86 carried to the surplus fund.

The net amount, therefore, available for the year was	$16,399,427 20
The expenditures were	13,918,833 78
Leaving a balance unexpended at the end of the year of	2,480,593 42
To this should be added the net amount unexpended in the hands of pay officers, as shown at the office of the Fourth Auditor	315,344 37
Showing the net expenditures for the fiscal year to have been	2,795,937 79

less than the amount applicable therefor.

The available appropriations for the present fiscal year ending June 30, 1884, were $14,205,247.23.

Amount drawn by warrant from the Treasury from July 1, 1883, to November 1, 1883	$5,567,469 18
Refunded during the same period	571,941 10
The actual expenditures have been	4,995,528 08

Being $101.223.55 less than was expended during the same period of last year, and leaving available November 1, 1883, $9,209,719.15.

ESTIMATES.

The estimates for the fiscal year ending June 30, 1885, are—

Pay of the Navy	$6,932,605 00
Pay, miscellaneous	350,000 00
Coal, hemp, and equipment	956,000 00
Ordnance and Torpedo Corps	574,010 00
Pay of civil establishment of the navy-yards	193,989 75
Navigation and navigation supplies	229,000 00
New Naval Observatory	586,138 00
Repairs and preservation of vessels	1,750,000 00
Steam machinery	1,200,000 00
Provisions for the Navy	1,200,000 00
Medical Department	40,000 00
Repairs of hospitals	30,000 00
Naval Hospital Fund	30,000 00
Naval Academy	184,625 45
Contingent expenses of Department and Bureaus	223,000 00
Naval Asylum, Philadelphia	92,251 00
Maintenance of yards and docks	420,000 00
Repairs and improvements of navy-yards	400,000 00
Support of Marine Corps	927,688 56
Making for the ordinary purposes of the service	16,319,307 76

INCREASE OF THE NAVY.

Completing the new steel cruisers:	
Hulls	$921,500 00
Machinery	620,000 00
Equipment	113,000 00
Ordnance	449,027 00
Completing the four double-turreted monitors	2,923,654 62
Ordnance for the same and the Miantonomoh	1,073,000 00
Additional steel rifled breech-loading guns	599,400 00
Completing hulls of the New York and Mohican	400,000 00
Completing the machinery for the New York	100,000 00
Two clipper sailing vessels for the training squadron	100,000 00
Tools for navy-yards asked by Bureau of Construction	150,000 00
Making for the increase of the Navy	7,449,581 62

The appropriations of $2,103,527 for completing the new cruisers should be made for the next fiscal year, but available during the present year if rapidity of construction requires their use. The appropriations of $3,996,654.62 for completing the monitors, increased $398,722 for a full ordnance outfit over the estimates of the Advisory Board, may, according to the discretion of Congress, be extended over more than one year; but authority to proceed with the work should be distinctly conferred.

COAST DEFENSES.

There is one measure of national defense in regard to which the argument cannot be made, as in the case of ships and guns, that modern discovery is likely to make such improvements in the art of construc-

tion that action might for the present be deferred. This is the creation of an interior coast-line of water-ways across the head of the peninsula of Florida, along the coast from Florida to Hampton Roads, between the Chesapeake Bay and the Delaware, and through Cape Cod. To these should be added a railroad from the mainland of Florida to Key West. To secure the combined commercial and military advantages which these avenues for merchant and naval vessels would afford, work should be immediately begun and deliberately and economically prosecuted, and not left to be done hastily and expensively in an emergency.

COALING STATIONS.

The United States should not be dependent upon the ports of the great naval powers for coal for the various squadrons in foreign waters. We have already established coaling stations at Honolulu, the Samoan Islands and at Pichilingue, in Lower California; and the Monongahela is being fitted for a store-ship at Callao to hold 1,000 tons of coal. Authority should be asked from Congress to fix the above stations on a firm basis, and to establish additional coaling and naval stations at some or all of the following points; Samana Bay, or some port in Hayti; Curaçao, in the Caribbean Sea; Santa Catharina, in Brazil; the Straits of Magellan; La Union, in Salvador, or Amapala, in Honduras; Tullear Bay, in Madagascar; Monrovia, in Liberia; the Island of Fernando Po; and Port Hamilton, in the Nan-how Islands of Corea; from which latter naval station and the ports of Corea there should be established a regular line of steamers carrying the United States flag, connecting with the present American line between San Francisco and Japan. Similar stations should in addition be maintained, one at the best point on the Atlantic side of the Isthmus of Panama, and another at the Islands of Flamenco, Perico, Culebra, and Ileñao on the Pacific side, now owned by American corporations.

EMPLOYMENT OF THE NAVY IN ALL NATIONAL WORK ON THE OCEAN.

In the report from this Department of last year it was affirmed as a broad and salutary principle of administration that the officers and seamen of the Navy should be employed to perform all the work of the national Government upon or in direct connection with the ocean. It was shown that such an extension of the field of naval employment would strengthen and invigorate the service without any detriment to existing interests, while the fusion of all branches of nautical administration would secure concentration of purpose, unity of action, and broader and more substantial results.

The reasoning upon which this proposition is based is simple and obvious. The United States have an ocean commerce of 2,500,000 tons and a sea-coast of 10,000 miles. Though the carrying trade has fallen largely into foreign hands, yet in maritime tonnage our country is still the second, and in extent *of coast-line* the third, in the world. Upon our

coast lie more than twenty great cities, the centers of distribution for the products of the interior. What affects them affects the whole country. The only safeguard for these important and vulnerable interests lies in the Navy. To dispense with a navy would be to invite aggression and to ensure disaster.

The Navy, as an arm of maritime defense, is therefore a national necessity. It must be maintained continuously for two purposes: to avert war, by making it costly and dangerous for an opponent; and to wage war, when it cannot be averted. From the nature of things, however, the fulfillment of these purposes cannot of itself give the naval force full and continuous employment. Nevertheless, it must be maintained, and maintained in a state of efficiency. Although the contingency that will call it into full activity is remote, its officers must always be kept in readiness. If they cannot be, it would be better, for the country's interest as well as for their own, that they should be disbanded.

There is only one way in which the people can assure themselves that their Navy shall be always thus prepared for service. It must be constantly occupied to the full measure of its capacity; its occupations must be directly in the line of its profession; and they must be carried on under the supervision of that Department which is responsible for its efficiency and discipline. If it were necessary, in order to effect this, that new work should be devised for the Navy to do, the result would be sufficiently important to warrant the undertaking. But it is not necessary. The Government is to-day performing, by means of other officials and other establishments, work which, in its general professional character and in the professional training required, is indistinguishable from that of the Navy itself. A sound policy demands that in it the Navy should be utilized, occupied, and practiced.

This nautical work now carried on by the Government outside of the Navy Department comprises the surveying and lighting of the coast and its adjacent islands; the prohibition of illicit trade, the assistance of vessels in distress, and the rescue of life and property from the perils of the sea; the inspection of the hulls and boilers of merchant steamers, with a view to their safe navigation; and the admeasurement and registration of vessels and the shipment and care of seamen of the merchant marine. The measures proposed by the Department consisted in the application to this unquestionably nautical work of the general principle advocated, and in its extension in the same direction by an organized and practical effort to supervise and advance the interests of our decayed merchant marine.

In applying the general principle to the nautical work within the province of the Government, it is found that one portion, the supervision of commerce by a single branch of the executive, though highly important and desirable, is not in operation at all; that a second portion, the shipment of seamen, is carried on by subordinate officials under no executive supervision; that a third portion, the survey-

ing and lighting of the coast, is done almost wholly by officers of the Navy, under the direction of the Treasury Department; while a fourth portion, consisting of the cutter service, the life-saving service, and the steamboat inspection, is also committed to bureaus in that Department, and is performed by officials connected therewith. In reference to the supervision of commerce and the shipment of seamen, the question whether they shall be directed by any Department, and, if so, by that of the Navy, is one that may be determined on its merits, without regard to existing relations. In reference to the Coast Survey, it is clear that the present arrangement, by which the direction and control of a large body of naval officers and seamen are transferred to the Treasury Department, is unsuitable, unnecessary, and detrimental to the interests of the Government. As to the rest of the work, which is now wholly carried on by the same Department, while no criticism is made upon the integrity or efficiency of its administration in any particular under the system adopted, yet the expediency of the system itself becomes a general question of national policy, which, not alone in its bearing upon the useful employment of the Navy, the Navy Department is competent and is called upon to consider.

In pursuance of this duty, and after careful inquiry and mature reflection, the Department, in its report of last year, recommended that the Navy should be employed, as far as was possible, to perform all this maritime work; and it suggested a process by which the transfer might be accomplished without any interruption of the operations of the Government. The views then expressed have only increased in strength, as added experience and discussion have thrown new light upon them. The main points of the argument are therefore restated, and the recommendations are emphatically renewed.

THE LIGHT-HOUSE BOARD.

The Light-House administration, charged with the establishment and care of aids to navigation, including light-houses, light-ships, beacons, buoys, fog-signals, and sea-marks, performs a work under the Treasury Department which is strictly nautical in character; of which no one but a practical navigator is a competent judge; which requires a kind of skill and experience that the Navy alone can furnish; and all the essential parts of which, excepting only the erection and repair of buildings and apparatus, are carried on at this time by naval officers. Being nautical and not fiscal operations, they should be supervised by the Navy and not the Treasury Department.

THE COAST SURVEY.

The Coast Survey, originally established for the purpose of making hydrographic charts, has of late years extended its functions in a totally different direction, that of geodetic surveys in the interior. In making this extension, it has gradually abandoned the water survey to the Navy,

until now the actual work in this field is done almost exclusively by naval officers withdrawn for the purpose from the direction and control of their own Department. By an extraordinary anomaly in legislation, the United States Hydrographic Office, an indispensable branch of this Department, is allowed to survey and make charts of every coast in the world but that of the United States; while the best naval surveyors are claimed by another Department to perform this work under its supervision. Sixty-seven naval officers are now diverted in this manner from the direction of the Navy; and 280 seamen, out of the 7,500 allowed to the Navy, are now on board Coast Survey vessels.

For such an arrangement there might be some show of reason if the work upon which the officers are engaged were specially connected with the Department under which they are placed, and remote from the subjects of which their own Department has cognizance; but, in view of the fact that no part of this work has the faintest traceable connection with the general purposes of the Treasury, that its effectual performance is of vital importance to the Navy, and that an office exists to-day in the Navy Department where similar work is necessarily carried on, it is inconceivable why so inconvenient, artificial, and indefensible an arrangement should be perpetuated. The existing office might properly continue the geodetic work, which seems gradually to be absorbing its attention and its appropriations, while the hydrographic surveys on our coast, now performed by naval officers, under a naval inspector, in the office of the Geodetic Survey, should be carried on, like other hydrographic surveys, by the Naval Hydrographic Office.

THE REVENUE MARINE AND THE LIFE-SAVING SERVICE.

The duties of the Revenue Marine, as officially defined, consist in cruising for the prevention of illicit trade, and for the enforcement of certain laws applicable to shipping, particularly those requiring the registry, enrollment, and license of vessels, compelling life-saving appliances to be kept therein, the name and hailing port to be affixed, and lights to be exhibited; prohibiting the overloading of passengers, assessing the marine-hospital tax, and aiding in the quarantine service of the States. The cutters further assist in enforcing the neutrality laws, and those for the suppression of piracy, and for the protection of the timber reserves. They are also called upon to prevent unlawful traffic in rum and fire-arms in Alaska; to protect the seal-fisheries, to suppress mutinies and extinguish fires on board merchant-vessels, and to carry out the laws in aid of distressed seamen.

Several of these duties, such as the enforcement of the neutrality laws, the suppression of piracy, of mutinies on board merchant-vessels, and the like, the ships of the Navy are now charged with and actually perform in common with revenue vessels. Of the rest, there is not one that is foreign to the general purpose and scope of the naval officer's profession. The only duty connected directly with the customs is that

of the seizure of smugglers—a duty which is precisely similar to the naval officer's duty of searching and seizing, during war, vessels engaged in contraband trade. It requires a knowledge of the statutes relating to the subject, a knowledge not very difficult to acquire; but beyond this nothing that is outside of a naval officer's necessary training. The duties of both services are identical in their general nature, only they operate in different localities. Both cruise to protect the maritime interests of the Government, and to render assistance to American vessels—the one on the coast, the other, in addition, at sea and in foreign waters. One polices the shore, the other the ocean. In war both engage in naval operations.

The practical identity in the character of the Naval and the Revenue-Marine Services lies in the fact that they are both nautical and both military. That the Revenue Marine is a nautical service requires no proof. It is nothing if not nautical. That it is a military service was officially asserted by the Treasury Department in the report on the service for 1881, in these words:

"The Revenue Marine, while charged by law with the performance of important civil duties, is essentially military in its character. Each vessel is provided with great guns, and furnished with as full a complement of small arms for its crew as any ship of war. Its officers are required to be proficient in military drill, and possess a thorough knowledge of the uses of both great and small arms. Its crews are required to be instructed from day to day at the great guns and in the use of the carbine, pistol, and cutlass. Commanding officers are required, while boarding vessels arriving in ports of the United States, in case of the failure or refusal of any such vessel, on being hailed, to come to and submit to the proper inspection by an officer of the service, to fire, first across her bows as a warning, and, in case of persistent refusal, to resort to shot or shell to compel obedience. In the performance of this work, they are likely at any time to receive injuries, and be subjected to the same dangers in time of peace as the force employed on naval vessels.

"By the Act of March 2, 1799, it is provided that 'the revenue cutters shall, whenever the President so directs, co-operate with the Navy.' It will be observed that the co-operation of the two services prescribed in the act above quoted is not contingent upon a state of war or other particularly perilous conditions. On the contrary, it may take place in time of peace and for pacific purposes, and when less hazard is involved to the two services than pertains to the discharge by a revenue vessel of its ordinary duties. * * It is difficult to conceive that discrimination could be made by the law between services subjected to equally hazardous and equally important military duties, both in time of peace and in time of war. * * Objection to granting pensions for the revenue-marine officers and seamen has been made, on the ground that such action would be extending this bounty to civil employés of the Government, a policy to which our legislative traditions, so to speak, are opposed. But, if in legal theory they are civil employés, are they so in fact? Are they less positively a part of our military force in time of war than the Army or Navy? It is true, revenue vessels are not to be ordered into action on purely military service, offensive or

defensive, except the President so direct; neither are vessels of the Navy."

The above clear and precise statement, showing that the so-called Revenue Marine is simply a coast navy, is without doubt correct and just, notwithstanding that the same subordinate in the Treasury Department who formulated it for official communication to Congress, now makes the following assertion, though not, as it appears, with the endorsement of the Secretary:

"The fact is, the business of the Revenue-Marine officer is as distinct from that of a naval officer as one land service is from another. The military drill and instruction of the Revenue-Marine officer do not necessarily make him a naval officer any more than the present education of a naval officer fits him to manage vessels in harbors and along the shoal waters of the coast."

Whether the views put forth in 1881, or the exactly opposite views emanating from the same person in 1883, are correct, and whether the service is to be considered as military or not, it is still unquestionably nautical; and it is for this reason that it comes within the scope of the general principle now advocated. It is because it forms a part of Government work in which officers and seamen are employed to navigate Government vessels, at sea, from port to port, that it may fitly become a part of the naval establishment. If the present system of military instruction is so defective that the officers of the revenue navy are not made naval officers, it would seem that some other system should be adopted to that end, seeing that they are "subjected to equally important and equally hazardous military duties, both in time of peace and in time of war," and that they are no less positively "a part of our military force in time of war than the Army or Navy." If, on the other hand, naval officers now have too little practice in coast navigation, a method should be devised of giving them such practice at once, for there is nothing more essential than this to success in the operations of modern warfare.

The plan proposed with these objects in view included the transfer to the Navy Department of the cruising cutters, their officers and seamen, (excepting the harbor boats used by the inspectors of customs, which do not require a special corps of officers); the organization of the officers transferred, as a Revenue-Marine Corps in the Navy, upon a footing precisely similar to that of the present naval officers; and the gradual employment of junior officers of the Navy in this service, as vacancies occur at the bottom of the list. Such a measure would accomplish the desired result while protecting effectually the interests of the existing corps.

The Live-Saving Service, being closely connected with the Revenue Marine, and being equally work of a nautical character, would necessarily follow the latter. The objection which has been suggested that naval officers are not surfmen, applies with equal force to officers of the Revenue Marine. It is obvious that one branch may be utilized in this

service as readily as the other. The objection that a necessary incompatibility exists between naval officers as such, and professional surfmen, which is not to be found in the relations to the latter of Revenue-Marine officers, requires no answer. The transfer of the service involves no displacement of the crews of life-saving stations; nor can any reason be adduced why they should not perform as good work in saving life endangered by the sea, under a department charged with nautical matters, as under one whose appropriate functions are the collection and disbursement of the revenue, the issue of the currency, and the regulation of the national debt.

THE BUREAU OF MERCANTILE MARINE.

In view of the close and essential connection between the Navy and the Mercantile Marine, it was further proposed to establish a Bureau of Mercantile Marine in the Navy Department, which should be charged with those branches of administration requiring a professional knowledge of the men and materials employed in commercial navigation. Such a bureau would include the registry, enrollment, and license of vessels, their admeasurement for tonnage, the inspection of steam vessels, and the shipment and care of seamen. It should further be made the business of the proposed bureau, aided by a board representing the principal maritime and commercial interests, to exercise such care and supervision over these interests as would tend to a recovery of our carrying trade, and in general to the prosperity of our rapidly decaying merchant marine. The time has arrived when such a central administration is a necessity, as the merchant marine cannot prosper while its governmental regulation remains in the present chaotic condition. Whether its regulation should be intrusted to this or to another existing department, or to a new department created for it, is still an open question.

The first plan was advocated upon three distinct grounds: first, that much of the work requires a special technical knowledge which it is the business of the Navy Department to have always at command; secondly, that as the Navy is now charged with the protection and assistance of our shipping interests abroad, it might be wisely connected with the promotion of these interests at home; and, finally, that as the merchant marine must always afford the sole reserve upon which, in emergencies, the Navy can draw to recruit its strength, the interests of the two are inseparably united.

The recommendations made in the report of last year were followed by considerable discussion, of which a brief notice may fitly be taken. In some of the remonstrances presented by commercial and other organizations the various subjects were so confused and distorted, and the general purpose of the recommendations was so entirely ignored that the objections failed to have a bearing upon the actual merits of the question. Other remonstrances were notoriously procured by persons who are

supported and given undue importance by the existing system, and who were alarmed lest change should destroy their occupations. In many instances the representations were not full or deliberate expressions of the opinion of the bodies whose names were used. Notably was this case with the resolutions of the Chamber of Commerce of New York, where the mover of an adverse resolution became himself the chairman of the committee to which the consideration of the measures was referred, and secured the adoption of a substantially similar resolution by a vote of only 17 out of 740 members of the Chamber.

Few of the arguments adduced by interested parties seem to have force against the broad general proposition that the direction of these nautical subjects should be united, and that the nautical department of the Government should carry on the work. The greater portion of them were based upon harsh criticisms of the past management of the Navy Department, and of the conduct of officers and seamen of the Navy. To these no rejoinder will be here engaged in, for an obvious reason. The question whether, as a permanent assignment, any particular subject-matter most appropriately belongs to one department or to another, must be settled on its merits, upon the assumption that both departments either are or will be ably and honestly conducted. Integrity and capacity in executive business are not the exclusive possession of any one branch of the Government, or of any one body of officials. To say that naval officers cannot wisely be employed on board the cruising cutters, whose principal use has no relation to the appropriate business of the Treasury Department, because occasionally dutiable articles have been brought home in naval vessels, is as unreasonable as to argue that the supervising inspectors should not inspect steam-vessels, because, in spite of their honesty and ability, terrible explosions of boilers have taken place directly after their most rigid examinations and unqualified certificates of approval. The real point in the present question, from which Congress should not be diverted by interested clamor, is: Ought these kindred branches of the public service to be united; and under which of the two departments, when both are well managed, should they be most naturally and appropriately conducted?

To stigmatize naval officers as idlers who are seeking to obtain an undue share of the civil administration is as unjust as it is illogical. If naval officers are idlers, it is because idleness is enforced upon them by a system which excludes them from the occupations for which they are peculiarly fitted. The remedy lies in giving them the employment which the naval service proper, in time of peace, cannot from its very nature fully afford. If they desire to obtain such employment, the desire is worthy and commendable. In the present case, the charge against them of encroachment is without foundation; since the recommendations in this report have been made, not at the instance or solicitation of officers of the Navy, but, upon a careful consideration, by the head of the Department, of the principles that should govern their employment.

If the Navy Department has not been wisely, economically, and energetically administered, and if naval officers have their faults or their vices, thorough reforms should be instituted, and such have been and will be unsparingly recommended and carried out. If they cannot be effected under the present distribution of executive powers, and if, on the other hand, the management of nautical affairs is an appropriate attribute of fiscal administration, then the existence of a separate nautical department is an error which should be rectified by placing the Navy under a bureau in the already comprehensive Department of the Treasury. But whether attached to one or to the other, all branches of nautical administration should be united. As well might the various parts of financial work be scattered among different departments as the fragments of nautical work be separated into an ocean navy here and a coast navy there; a survey of foreign coasts under one department and a survey of our own under another; a bureau and an engineer corps for the engines of naval steamers, and another bureau and another engineer corps for those of merchant steamers. Wherever the direction of nautical affairs is placed, all its branches should be under a common head, and should work with a common purpose.

One general argument has been presented against the transfer, in the form of an objection to employing military officers in civil duties. This is wholly out of place when applied to the army or navy of a popular government in a law-abiding community. In a despotism, where a standing army is maintained without the consent of the people and may be used for the repression of liberty, it would be wise to resist the extension of military employment to civil labors, even though the saving of expense should partly balance the evils resulting from an increase of despotic control. But in the United States the Army and Navy are the creation of the popular will. They are organized and supported only because the people deem them necessary for national existence and safety, and they can be disbanded at the pleasure of the people. They are equally with all other officials under the direction of a civil administration. They can therefore be wisely and safely employed in any work that will not impair their efficiency or discipline, and where their employment would save money that would otherwise be paid to maintain an unnecessary civil establishment. They should by all means be so employed when the service will not only relieve and benefit the people, but will add to the professional experience and to the fitness for war duties of the officers and men. Their exclusion can only be justified on the theory that to render them harmless they must be rendered inefficient; a theory which, if carried out, would result in the immediate abolition of the service.

The argument in favor of the full use of the Navy in all appropriate labors of peace becomes stronger as the nation seems more unlikely to engage in actual warfare. Our international policy tends to peace with all the world; our conflicts will be infrequent; and therefore more than

all other nations we should utilize our officers, seamen, and ships in the nautical works which peace-times require. Such are their appropriate sphere, not for their private benefit, but for the greater good of the Government to which they desire to give the fullest possible service.

In presenting its recommendations last year, the Department made every effort to mature its opinion by the fullest and most exhaustive examination of the subject. Had it done otherwise it would have fallen short of its duty. The question has a vital bearing upon the improvement of the Navy, and is in no way dependent upon the character of administration for the time being in this or that department. It is a broad question of permanent policy and statesmanship. In such a spirit it has been dealt with here. It is not, perhaps, to be expected that such an extensive change will commend itself, at the first inspection, to the community and to Congress while those who live upon the existing system are seeking, by denunciatory methods, to create an unfavorable public sentiment. But it is believed that the advantages of the change, when impartially examined, will be recognized, and that it must ultimately be made. In such a confident belief the Department renews its recommendations, basing them not upon an appeal to popular prejudice, or upon recriminations, as odious as they are irrelevant, respecting the conduct of other branches of the public service, but upon a calm and candid consideration of the whole question, in the interests of a sound administrative policy, and of the efficiency of the naval arm of the Government as closely connected therewith.

THE MERCHANT STEAM MARINE.

Too much prominence cannot be given to the fact that our naval progress must depend upon the revival of our merchant steam marine. The profitable carrying trade of the world is performed not merely in large and fleet modern screw-steamers, but in such steamers forming regularly established lines, with fixed hours of departure and almost of arrival, to all the great coast cities of both hemispheres. In this business we hardly participate at all, except on the Pacific Ocean. Our steam communication with South America and Europe is carried on by vessels under the flag of our commercial rivals. Persistence in a policy which gives such results is discreditable in a nation adapted by its resources, traditions, and the disposition of its people to be a great maritime state. This we can never again become with only a coastwise traffic protected by the enforced exclusion of all except our own ships. We should immediately commence the establishment of steamship lines to South America and across the North Atlantic Ocean. The longer we delay the more difficult and expensive will be the work. To enable our capitalists, merchants, and shipowners, in the beginning, to meet successfully the cheap capital and labor of Europe which have established the foreign lines, the assistance of our Government is essential and should be rendered upon the same principle and method as

have been adopted for the development of our landed possessions; namely, the payment, upon whatever routes the national interests may require to be established, of such compensation for carrying the mails of the United States as will secure the commencement and continuance of the service. Contracts for such compensation, for terms of years, awarded to the lowest bidders, after full public competition, would soon give us a fleet of modern ocean steamships of the highest power and capacity, improving our home industries, extending our foreign trade, elevating the national power and dignity and forming for any emergency a most important part of our naval force.

WILLIAM E. CHANDLER,
Secretary of the Navy.

PAPERS

ACCOMPANYING

THE REPORT OF THE SECRETARY OF THE NAVY.

ESTIMATES AND APPROPRIATIONS.

Estimates of appropriations required for the service of the fiscal year ending June 30, 1885, by the Navy Department.

Detailed objects of expenditures, and explanations.	Estimated amount which will be required for each detailed object of expenditure.	Amount appropriated for the current fiscal year ending June 30, 1884.
SALARIES, OFFICE OF THE SECRETARY OF THE NAVY.		
Secretary	$8,000	
Chief clerk	2,500	
Disbursing clerk	2,250	
Four clerks of class four	7,200	
Three clerks of class three	4,800	
One stenographer	1,600	
Two clerks of class two	2,800	
Six clerks of class one	7,200	
Four clerks, at $1,000	4,000	
One telegraph operator	1,000	
One carpenter	1,000	
Two messengers	1,680	
Three assistant messengers	2,160	
One messenger boy	420	
One telegraph messenger boy	240	
Three laborers	1,080	
One clerk of class two and one laborer (for inspection board)	2,060	
One clerk of class two (for examining and retiring board)	1,400	
One clerk of class one and one assistant messenger (in care of library)	1,920	
	54,210	$54,210
CONTINGENT EXPENSES.		
Stationery, furniture, newspapers, and miscellaneous items	5,000	
SALARIES, OFFICE OF THE JUDGE-ADVOCATE-GENERAL.		
One clerk of class three, appropriated March 3, 1883	1,600	
Two clerks of class one, appropriated March 3, 1883*	2,400	
One clerk, appropriated March 3, 1883	1,000	
One laborer, appropriated March 3, 1883	660	
	5,660	5,660
CONTINGENT EXPENSES, NAVY.		
Contingent expenses of the Navy, namely: Rent and furniture of buildings and offices not in navy-yards; expenses of courts-martial and courts of inquiry, boards of investigation, examining boards, with clerks' and witnesses' fees, and traveling expenses and costs; stationery and recording; expenses of purchasing-paymasters' offices at the various cities, including clerks, furniture, fuel, stationery, and incidental expenses; newspapers and advertising; foreign postage; telegraphing, foreign and domestic; telephones; copying; care of library; mail and express wagons, and livery and express fees, and costs of suits; commissions, warrants, diplomas, and discharges; relief of vessels in distress, and pilotage; recovery of valuables from shipwrecks; quarantine expenses; care and transportation of the dead; reports, professional investigations, and information from abroad, and all other emergencies and extraordinary expenses arising at home or abroad, but impossible to be anticipated or classified	$100,000 00	$100,000 00
PAY MISCELLANEOUS.		
For two secretaries, one to the Admiral and one to the Vice-Admiral, clerks to paymasters' clerks at inspections, navy-yards, and stations, and extra pay to men enlisted under honorable discharge; commission and interest, transportation of funds, exchange, mileage to officers while traveling under orders in the United States, and for actual personal expenses of officers while traveling abroad under orders, and for traveling expenses of apothecaries, yeomen, and civilian employés; and for actual and necessary traveling expenses of naval cadets while proceeding from their homes to the Naval Academy for examination and appointment as cadets, and for payment of any such officers as may be in service, either upon the active or retired list, during the year ending June thirtieth, eighteen hundred and eighty-five, in excess of the numbers of each class provided for in this act, and for any increase of pay arising from different duty, as the needs of the service may require, three hundred and fifty thousand dollars	$350,000 00	$300,000 00

* One clerk of class two ($1,400), submitted.

Estimate of the amount required to pay the officers of the United States Navy for the fiscal year ending June 30, 1825.

Grade.	Sea duty.			Other duty.			Waiting orders.		
	No.	Pay per annum.	Total.	No.	Pay per annum.	Total.	No.	Pay per annum.	Total.
Admiral				1	$13,000	$13,000			
Vice-Admiral				1	8,000	8,000			
Rear-admiral, chief of Bureau				1	5,000	5,000			
Rear-admiral	4	$6,000	$24,000	2	5,000	9,000	1	$4,000	$4,000
Commodores, chief of Bureau				1	5,000	5,000			
Commodores	2	5,000	10,000	12	4,000	48,000	7	3,000	21,000
Captains, chief of Bureau				2	5,000	10,000			
Captains	10	4,500	45,000	25	3,500	87,500	10	2,800	28,000
Commanders	24	3,500	84,000	43	3,000	129,000	20	2,300	46,000
Lieutenant-commanders, second 5 years	17	3,000	51,000	21	2,600	54,600	5	2,200	11,000
Lieutenant-commanders, first 5 years	16	2,800	44,800	11	2,400	26,400	8	2,000	16,000
Lieutenants, second 5 years	100	2,600	260,000	86	2,200	189,200	22	1,800	39,600
Lieutenants, first 5 years	35	2,400	84,000	21	2,000	42,000	8	1,600	12,800
Lieutenants (junior grade), second 5 years	13	2,000	26,000	14	1,700	23,800	5	1,400	7,000
Lieutenants (junior grade), first 5 years	36	1,800	64,800	20	1,500	30,000	7	1,200	8,400
Ensign, second 5 years	13	1,400	18,200	11	1,200	13,200	2	1,000	2,000
Ensign, first 5 years	50	1,200	60,000	12	1,000	12,000	7	800	5,600
Ensign, junior grade	70	1,000	70,000	16	800	12,800	12	600	7,200
Naval cadets	73	950	69,350	2	500	1,000	30	500	15,000
Medical director, chief of Bureau				1	5,000	5,000			
Medical director, after 20 years				10	4,000	40,000	4	3,000	12,000
Medical inspectors, after 20 years				3	4,000	12,000	1	3,000	3,000
Medical inspectors, fleet	4	4,400	17,600						
Medical inspectors, fourth 5 years				6	3,600	21,600	1	2,800	2,800
Surgeons, fleet	1	4,400	4,400						
Surgeons, fourth 5 years	3	3,700	11,100	6	3,000	21,600	1	2,800	2,800
Surgeons, third 5 years	5	3,500	17,500	4	3,200	12,800	3	2,600	7,800
Surgeons, second 5 years	3	3,200	9,600	5	2,800	14,000	4	2,400	9,600
Surgeons, first 5 years	6	2,800	16,800	7	2,400	16,800	2	2,000	4,000
Passed assistant surgeons, after 5 years	37	2,200	81,400	27	2,000	54,000	9	1,700	15,300
Passed assistant surgeons, first 5 years	1	2,000	2,000	5	1,800	9,000			
Assistant surgeons, first 5 years	4	1,700	6,800	4	1,400	5,600			
Assistant surgeons (not in line of promotion)				2	{1,800 / 1,600}	3,400			
Pay directors, after 20 years				6	4,000	24,000	5	3,000	15,000
Pay directors, fourth 5 years				1	3,600	3,600	1	2,800	2,800
Pay inspectors, chief of Bureau				1	5,000	5,000			
Pay inspectors, fleet	3	4,400	13,200						
Pay inspectors, after 20 years				4	4,000	16,000	2	3,000	6,000
Pay inspectors, fourth 5 years				3	3,600	10,800			
Paymasters, fleet	2	4,400	8,800						
Paymasters, fourth 5 years	3	3,700	11,100	8	3,600	28,800	4	2,800	11,200
Paymasters, third 5 years	3	3,500	10,500	6	3,200	19,200	1	2,600	2,600

Estimate of the amount required to pay the officers of the United States Navy for the fiscal year ending June 30, 1885—Continued.

Grade.	Sea duty.			Other duty.			alting orders.		
	No.	Pay per annum.	Total.	No.	Pay per annum.	Total.	No.	Pay per annum.	Total.
Paymasters, second 5 years	1	$3,200	$3,200	7	$2,800	$19,600	5	$2,400	$12,000
Paymasters, first 5 years	4	2,800	11,200	4	2,400	9,600	1	2,000	2,000
Passed assistant paymasters, second 5 years	7	2,200	15,400	3	2,000	6,000	4	1,700	6,800
Passed assistant paymasters, first 5 years	8	2,000	16,000				7	1,500	10,500
Assistant paymasters, first 5 years	4	1,700	6,800	8	1,400	11,200	8	1,000	8,000
Chief engineer, chief of Bureau				1	5,000	5,000			
Chief engineer, fleet	6	4,400	26,400						
Chief engineer, after 20 years				17	4,000	68,000	4	3,000	12,000
Chief engineers, fourth 5 years	2	3,700	7,400	2	3,600	7,200			
Chief engineers, third 5 years	6	3,500	21,000	6	3,200	19,200	3	2,600	7,800
Chief engineers, second 5 years	1	3,200	3,200	3	2,800	8,400	4	2,400	9,600
Chief engineers, first 5 years	7	2,800	19,600	3	2,400	7,200	5	2,000	10,000
Passed assistant engineers, second 5 years	30	2,200	66,000	21	2,000	42,000	24	1,700	40,000
Passed assistant engineers, first five years	9	2,000	18,000	8	1,800	14,400	1	1,500	1,500
Assistant engineers, second 5 years	12	1,900	22,800	10	1,600	16,000	3	1,200	3,600
Assistant engineers, first 5 years	30	1,700	51,000	20	1,400	28,000	3	1,000	3,000
Chaplain, second 5 years	5	2,800	14,000	5	2,300	11,500	9	1,900	17,100
Chaplain, first 5 years	4	2,500	10,000				1	1,600	1,600
Professors, after 20 years				4	3,500	14,000			
Professors, third 5 years				2	3,000	6,000			
Professors, second 5 years				3	2,700	8,100			
Professors, first 5 years				2	2,400	4,800			
Naval constructor, chief of Bureau				1	5,000	5,000			
Naval constructor, fourth 5 years				4	4,000	16,000			
Naval constructor, third 5 years				6	3,700	22,200			
Assistant naval constructor, after 8 years				4	2,600	10,400			
Assistant naval constructor, first 4 years				3	2,000	6,000	2	1,500	3,000
Civil engineers, second 5 years				4	2,700	10,800			
Civil engineers, first 5 years				5	2,400	12,000	1	1,500	1,500
Secretaries to Admiral and Vice-Admiral				2	2,500	5,000			
Boatswain, after 12 years	7	1,800	12,600	9	1,600	14,400	11	1,200	13,200
Boatswain, fourth 3 years	3	1,600	4,800	6	1,300	7,800	1	1,000	1,000
Boatswain, third 3 years	1	1,400	1,400				1	900	900
Boatswain, second 3 years	1	1,300	1,300	3	1,000	3,000	2	800	1,600
Boatswain, first 3 years	4	1,200	4,800				1	700	700
Gunners, after 12 years	9	1,800	16,200	16	1,600	25,600	11	1,200	13,200
Gunners, fourth 3 years	1	1,600	1,600	4	1,300	5,200	2	1,000	2,000

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Estimate of amount required to pay officers of the Navy on the retired list for 1884–1885.

Grade.	Number.	Pay.	Amount.
Rear-admirals	36	$4,500	$162,000
Do	5	3,750	18,750
Do	2	3,375	6,750
Commodores	12	3,750	45,000
Do	4	3,375	13,500
Do	2	2,625	5,250
Do	1	1,950	1,950
Do	1	1,150	1,150
Captains	2	3,375	6,750
Do	3	2,625	7,875
Do	1	2,250	2,250
Do	2	1,950	3,900
Do	1	1,150	1,150
Do	2	900	1,800
Commanders	6	2,625	15,750
Do	1	2,100	2,100
Do	1	1,750	1,750
Do	1	1,400	1,400
Do	1	1,150	1,150
Do	2	900	1,800
Lieutenant-commanders	7	2,250	15,750
Do	3	2,100	6,300
Do	1	1,900	1,900
Do	1	1,500	1,500
Do	2	1,100	2,200
Do	1	1,000	1,000
Do	1	700	700
Lieutenants	11	1,950	21,450
Do	1	1,800	1,800
Do	1	1,300	1,300
Do	2	1,200	2,400
Do	1	900	900
Lieutenants (junior grade)	3	1,500	4,500
Do	5	1,350	6,750
Do	3	900	2,700
Ensigns	3	900	2,700
Do	2	600	1,200
Do	1	500	500
Ensign (junior grade)	1	300	300
Medical directors	3	3,750	11,250
Do	12	3,300	39,600
Do	5	3,150	15,750
Do	1	2,775	2,775
Do	1	2,400	2,400
Medical inspector	1	3,300	3,300
Do	1	1,300	1,300
Surgeons	2	2,625	5,250
Do	2	2,100	4,200
Passed assistant surgeons	4	1,650	6,600
Do	1	1,100	1,100
Assistant surgeons	4	1,425	5,700
Do	1	1,275	1,275
Do	1	950	950
Do	1	850	850
Pay directors of Bureau, retired chiefs	3	3,750	11,250
Do	6	3,300	19,800
Pay inspector	1	3,300	3,300
Do	1	2,200	2,200
Paymaster	1	2,625	2,625
Do	1	2,400	2,400
Do	1	2,100	2,100
Do	1	1,400	1,400
Passed assistant paymaster	1	1,650	1,650
Do	1	1,500	1,500
Assistant paymaster	1	1,425	1,425
Chief engineers of Bureau, retired chief	1	3,750	3,750
Do	4	3,300	13,200
Do	4	2,625	10,500
Do	1	2,400	2,400
Do	1	1,200	1,200
Passed assistant engineers	10	1,650	16,500
Do	2	1,500	3,000
Do	4	1,275	5,100
Do	2	1,100	2,200
Do	1	950	950
Do	1	850	850
Assistant engineers	13	1,425	18,525
Do	7	1,275	8,925
Do	2	950	1,900
Do	1	850	850

Estimate of amount required to pay officers of the Navy, &c.—Continued.

Grade.	Number.	Pay.	Amount.
Assistant engineers	2	$600	$1,200
Do	1	500	500
Chaplains	8	2,100	16,800
Professors of mathematics	3	2,625	7,875
Do	2	2,025	4,050
Do	1	1,800	1,800
Naval constructor, retired chief of Bureau	1	3,750	3,750
Civil engineers	2	2,625	5,250
Do	1	2,250	2,250
Boatswains	9	1,350	12,150
Do	1	1,050	1,050
Do	1	975	975
Do	1	900	900
Do	1	600	600
Gunners	10	1,350	13,500
Carpenters	9	1,350	12,150
Sailmakers	7	1,350	9,450
Petty officers, seamen, ordinary seamen, &c			$2,400,000
Seven hundred and fifty boys			100,000

RECAPITULATION.

739 officers on sea duty	$1,532,250
858 officers on shore duty	1,652,600
229 officers on waiting orders	534,300
308 officers on retired list	713,455
2,134	4,432,605
Brought down	4,432,605
Petty officers, &c	2,500,000
Total	6,932,605

REPORTS OF THE NAVAL ADVISORY BOARD.

NEW STEAM CRUISERS FOR THE UNITED STATES NAVY.

Advertisement and notice concerning the construction of new steel steam cruising vessels for the United States Navy.

Invitation is hereby extended to all engineers and mechanics of established reputation, and all reputable manufacturers of vessels, steam-engines, boilers or ordnance, having or controlling regular establishments, and being engaged in the business, all officers of the Navy, and especially all naval constructors, steam engineers, and ordnance officers of the Navy, having plans, models, or designs of any vessels, or of any part thereof, of the classes authorized by the naval appropriation act of August 5, 1882, to submit such plans, models, and designs to the Naval Advisory Board, directed to be organized by the Secretary of the Navy under the provisions of said act, for his advice and assistance in the designing and constructing of said vessels, in order that the same may be examined by said Board in accordance with the provisions of said act.

The vessels authorized by said act are to be two in number, to be constructed of steel of domestic manufacture, having, as near as may be, a tensile strength of not less than 60,000 pounds to the square inch, and a ductility in 8 inches of not less than 25 per centum; to be provided with full sail and full steam power, and to be of the highest attainable speed, and adapted to be armed with suitable armaments, described in

said act; and one is to be of not less than 5,000 nor more than 6,000 tons displacement, and the other of not less than 4,300 nor more than 4,700 tons displacement.

Said plans, models, and designs should be submitted within the period of sixty days after August 20, 1882, and should be transmitted to the Navy Department, Washington, D. C.

The Department will, upon application, forward copies of so much of the naval appropriation act as relates to said vessels, and will answer all letters of inquiry and furnish all desired information on the subject.

WILLIAM E. CHANDLER,
Secretary of the Navy.

NAVY DEPARTMENT,
Washington, August 5, 1882.

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ARMORED VESSELS.

REPORT OF THE NAVAL ADVISORY BOARD.

NAVAL ADVISORY BOARD,
Washington, October 25, 1883.

SIR: The Board respectfully present this final report, completing its duty required by the act of Congress of August 5, 1882, in regard to whether any changes should be made in the original plans of the Puritan, Monadnock, Terror, and Amphitrite.

Attention is respectfully directed to the Board's preceding reports as follows:

Inclosure A, dated December 15, 1882, giving reasons for considering it wise and expedient to finish the monitors.

Inclosure B, dated January 11, 1883, giving in detail the changes recommended in plans of Puritan and the cost of completion.

Inclosure C, dated April 5, 1883, in compliance with the Department order of March 9, 1883, preparatory to the execution of the provisions of the act of Congress of March 3, 1883, requiring the approval of the Board to the contracts for the completion of the machinery of the monitors.

Inclosure D, dated May 31, 1883, giving estimates for the cost of completion of the machinery of the monitors.

Inclosure E, dated June 15, 1883, approving the contracts for the completion of the machinery of the Puritan, Terror, and Amphitrite.

PURITAN.

In carrying out the Board's recommendations in regard to the machinery (Inclosure C) it is necessary to reduce the coal supply by 100 tons; in making the detailed drawing of the turrets and loading appliances it has been found practicable to reduce the internal diameter from 22 to 19 feet. The consequent reduction in weight due to these changes and those in the arrangement of the turret chambers renders it possible to considerably increase the fighting power and efficiency of the Puritan by adding to the ammunition allowance, by increasing the thickness of the armor throughout the deck by as nearly 1 inch as the weights will allow, by increasing the side armor for 181 feet amidships from 11 to 12 inches for a depth of 3 feet 6 inches, and increasing the armor on the turrets from 14 to 15 inches in thickness.

These changes are included in the plans prepared by the Board, and the total cost to complete the Puritan according to these plans, will be for

HULL,

To complete according to the present plans, with changes in side armor, deck armor, turrets, smoke-pipe, ventilators, and anchors		$1,027,000 00
Less amount paid for launching	$21,975 00	
Less amount on hull paid under contract of June, 1883	45,123 44	
Balance of tenth payment due under contract of March, 1875, already appropriated	4,560 00	
		71,658 44
Total		955,341 56

MACHINERY.

Two separate pairs of engines, gears, pipes, as per drawing, for turning turret	13,890 00

ORDNANCE.

Four 10½ breech-loading rifles, with hydraulic apparatus, four Hotchkiss guns, four Gatling guns, electric light, &c., and torpedo outfit	172,250 00
Total to complete	1,141,481 56

TERROR, AMPHITRITE, AND MONADNOCK.

The Board recommends that the turrets of these vessels be of the roller-base pattern, with central ammunition supply, and arrangements for independent loading at any point; that the armament consist of four 10-inch high-powered breech-loading rifled guns, with hydraulic loading and recoil mechanism, together with the same machine gun, small-arm, torpedo, and electric outfit as prescribed for the Puritan; that the armor of the turrets and side be either steel or steel-faced, that of the turrets to consist of 11½ plates with 12½ port plates, arranged, backed, and fastened in the same manner as proposed by the Department for the Miantonomoh; that on the side to consist of plates of a single depth and of the following thicknesses for a distance of about 136 feet amidships: 7 inches from the top to a depth of 36 inches, thence tapering to 4 inches at the bottom: from the forward end of this section to the bow and from the after end to a length of about 21 feet, the thickness to be 7 inches from the top to a depth of 36 inches, thence tapering to 4 inches at the bottom; from the ends of this section around the stern, 6 inches thick throughout.

Estimates.

TERROR.

HULL.

To complete according to present plans, with changes in turrets, side armor		$688,500 00
Less amount paid for launching	$15,539 00	
Less balance of reservations on contract of March 1875, already appropriated	12,500 00	
Less amount on hull to be paid under contract of June, 1883	33,173 32	
		61,212 32
Total		627,287 68

MACHINERY.

Two pairs of engines, gear-pipes, &c., as per drawings for turning turret	11,500 00

ORDNANCE.

Four 10-inch B. L. R., with hydraulic apparatus, four Hotchkiss guns, four Gatling guns, electric light, &c., and torpedo outfit	146,480 00
Total to complete	785,267 68

AMPHITRITE.

HULL.

Items same as for Terror		$688,500 00
Less amount paid for launching	$14,774 00	
Less balance of reservation on contract of March, 1875, already appropriated	1,300 00	
Less amount on hull to be paid under contract of June, 1883.	33,172 32	
		48,916 32
Total		639,583 68

MACHINERY.

Items same as for Terror	11,500 00

ORDNANCE.

Items same as for Terror	146,480 00
Total to complete	797,563 68

MONADNOCK.

Hull to be built in California.

Items same as for Terror		$785,500 00
Less amount paid for launching	$44,834 00	
Less amount to be paid for hull under contract of June, 1883.	35,172 32	
Less balance of reservation under contract of March, 1875.	4,051 98	
		84,058 30
Total		701,441 70

MACHINERY.

Items same as for Terror	11,500 00

Ordnance to be fitted in California.

Items same as for Terror	161,128 00
Total to complete Monadnock	874,069 70
Total to complete all monitors	3,598,382 62

The recommendation of the roller-base turret for these vessels is made on account of the necessity of making estimates on some actual basis. In case of the success of the tests upon the target representing Clark's deflective turret and the examination of his final designs should result in a recommendation of his system for these ships, it is considered that turrets of the Clark system may be substituted without affecting the estimates.

Very respectfully,

R. W. SHUFELDT,
Rear-Admiral, United States Navy, President of the Board.
HENRY STEERS,
Naval Architect and Member.
MIERS CORYELL,
Marine Engineer and Member.
ALEX. HENDERSON,
Chief Engineer, United States Navy, and Member.
J. A. HOWELL,
Commander, United States Navy, and Member.
EDWARD W. VERY,
Lieutenant, United States Navy, and Member.
F. L. FERNALD,
Naval Constructor, United States Navy, and Member.

Hon. W. E. CHANDLER,
Secretary of the Navy.

[Inclosure A. Naval Advisory Board, October 25, 1883.]

NAVAL ADVISORY BOARD,
Washington, December 15, 1882.

SIR: In compliance with the act of Congress of August 5, 1882, requiring this Board to report as to the wisdom and expediency of completing the monitors Puritan, Terror, Amphitrite, and Monadnock, we have the honor to report that we have made personal examinations of the hulls of these vessels, except the Monadnock, which was examined by the president of the Board. We have also examined thoroughly all the reports that have been made by previous boards, by the Admiral of the Navy, and by the other authorities, and we have also examined, as far as possible, all the literature pertaining to foreign armored vessels of corresponding size.

It is our opinion that it would be wise and expedient to finish these vessels at once, and for the following reasons, viz:

1st. The hulls, as they are at present, are of excellent workmanship, fully up to the present standard of iron ship construction, whilst the flotation of the Puritan and the behavior of the Miantonomoh at sea confirm the correctness of the calculations of the designs.

2d. It is easily possible to complete the vessels by taking advantage of the recent developments in armor, guns, and machinery, without making any radical changes in the designs, so that their speed, endurance, battery power, protection, and sea-going qualities shall be fully equal to those of any foreign iron-clad of similar dimensions designed previous to 1879.

3d. The vessels may be finished so as to develop all the above-mentioned advantages without making their total cost when completed in any way exorbitant compared with the value of the results obtained; again, the interests of our sea-coast defense require a force at least equal to that which would be represented by those vessels.

We take the liberty of calling your attention to a certain erroneous impression which now exists with regard to these vessels. In one of the official reports upon these hulls a doubt was thrown upon the correctness of the calculations of the Puritan. This doubt has spread in the public mind until it includes all the ships. The actual flotation of the Puritan and the Miantonomoh proves beyond question not only the entire reliability of the calculations, but also that the hulls of these vessels are lighter in proportion to the total displacement than those of any iron-clad low-freeboard hulls afloat, with but two exceptions.

It has been the unfortunate custom, in arguments as to the value of the results to be obtained, to compare them with such foreign ships as the Inflexible and Duilio to the evident disadvantage of the monitors, no account whatever being taken of the fact that these vessels are double the size of the monitors.

If these hulls be compared with foreign ones of similar dimensions, no such disparity will appear.

The Board has the honor to report that it will be prepared before the end of January to submit complete and detailed plans, together with the estimates of cost, for the completion of the Puritan. With regard to the other vessels, their inferior dimensions will require more time and

more careful examination to prepare detailed designs that shall give them the highest possible efficiency.

Very respectfully,

R. W. SHUFELDT,
Commodore, United States Navy, President of the Board.
HENRY STEERS,
Member.
MIERS CORYELL,
Member.
ALEXANDER HENDERSON,
Chief Engineer, United States Navy.
J. A. HOWELL,
Commander, United States Navy.
EDWARD W. VERRY,
Lieutenant, United States Navy.
F. L. FERNALD,
Naval Constructor, United States Navy.

Hon. W. E. CHANDLER,
Secretary of the Navy.

[Inclosure B. Naval Advisory Board, *October* 25, 1883.]

No. 28.

NAVAL ADVISORY BOARD,
Washington, January 11, 1883.

SIR: The Board respectfully present the following comparison of the Puritan with foreign ships as an appendix to our report of this date:

In order that a true estimate may be made of the value of the Puritan as a fighting vessel when completed in accordance with the foregoing recommendations, we make the following summarized comparison of the ship with two vessels of a closely corresponding tpye and size, which represent the latest developments in the English and French naval architecture applied to coast defense.

TURRET SHIPS.

In the British navy list, the Conqueror (now building) approximates quite closely to the Puritan in dimensions and type; and in the French navy list the Tonnerre and class, although somewhat smaller ships, are close enough in size to admit of direct comparison.

Measurement.	Conqueror.	Puritan.	Tonnerre.
Local displacement ..... tons..	6,200	6,060	5,580
Length between perpendiculars ..... feet..	270	280	241½
Extreme breadth ..... do....	58	60	57½
Mean draught ..... do....	23	18	20½
Immersed midship section ..... square feet..	1,145	1,027	1,000
Indicated horse-power	4,500	4,167	4,166
Maximum speed ..... knots..	*13	†12¾	†14
Coal supply ..... tons..	650	514	270
Armament	2 12-inch B. L. R. 2 6-inch B. L. R.	4 10½-inch B. L. R.	2 10½-inch B. L. R.
Number of turrets	1	2	1
Thickness of turret armor ..... inches..	12	14	12½
Thickness of deck armor ..... do....	2½ and 1½	3 and 2	2
Thickness of side armor, amidships ..... do....	12	11	13
Thickness of side armor, bow ..... do....	8½	10	9.8
Thickness of side armor, quarter ..... do....	11	10	11.8
Thickness of side armor, stern ..... do....	0	8	11.8

*Estimated. †Actual.

MANEUVERING POWER.

The Conqueror was designed with especial regard to the full development of ramming power, necessitating the greatest possible handiness. An examination of the measurements will show that the proportion of length to breadth is the same as that of the Puritan, whilst the latter has the great superiority in her lighter draught, which, taken in connection with her greater speed and greater number of guns and powerful ram-bow, gives her, in the opinion of the Board, a marked superiority over the English ship in maneuvering power. On the other hand, the Tonnerre, being shorter in proportion to her beam, and having a higher speed, should possess greater mobility, but this quality is greatly modified, if not completely neutralized, by her excessive draught of water.

SPEED AND ENDURANCE.

The speed of the Puritan is superior to that of the Conqueror, whilst it is inferior to that of the Tonnerre. This superiority of the French ship is, however, gained at a great sacrifice of coal capacity or endurance; so great, indeed, as, in the opinion of the Board, to entirely unfit her for any prolonged operations at a distance from a coaling station. The endurance of the Puritan and the Conqueror is the same.

ARMAMENT.

In the power of individual guns the Conqueror is superior to the Puritan, whilst the latter is in about the same proportion superior to the Tonnerre. Since, however, the Puritan's guns have sufficient power to overcome the armor of both the other ships, the efficiency of the armament depends directly upon the number of guns which the ship can bring into action. In this respect the Puritan has a marked superiorty over both the other ships, since she has double the number of guns. The 6-inch guns of the Conqueror are left out of consideration, as they are powerless against the Puritan, and have no protection except from machine fire.

ARMOR.

In thickness of turret, deck, and bow armor the Puritan is superior to both the other ships, whilst amidships and aft it is inferior, it being considered that this sacrifice is more than compensated by the gain in power of armament, especially since the machinery and steering-gear are fully protected by the heavy backing and coal.

The information available with regard to cost of the three ships is too meager to admit of a detailed comparison, but, in the opinion of the Board, the amount estimated for the completion of the Puritan is in no way excessive, and compares favorably with estimates of the cost of other foreign armored vessels of corresponding size.

Very respectfully, your obedient servant,

R. W. SHUFELDT,
Commodore, United States Navy, President of the Board.

Hon. W. E. CHANDLER,
Secretary of the Navy.

[Inclosure C. Naval Advisory Board, October 25, 1883.]

UNITED STATES NAVAL ADVISORY BOARD,
NAVY DEPARTMENT,
Washington, D. C., April 5, 1883.

SIR: In obedience to the directions contained in your order of the 10th ultimo, regarding the machinery of the United States double-turreted monitors, we have to report:

That we have carefully examined the plans and specifications submitted to this Board by the Bureau of Steam Engineering for the machinery of the Puritan, and we are of the opinion that the general plans and dimensions of the engines and boilers are sufficient to insure the power required, and the weights of the same are not excessive, and that with the following amendments the specifications are such as we advise to be prepared for the building and erection on board the vessel of these engines, together with the boilers already completed, viz:

U. S. IRON-CLAD PURITAN.

That the low-pressure cylinders be fitted with separate expansion valves.

That the journals of both crank-shafts and crank-pin be increased in length. That the reversing arrangement consist of a pair of small cylinders operating a worm-wheel in connection with the links in lieu of the single large cylinder.

That the air and circulating pumps be combined in accordance with the arrangement proposed in the accompanying plans.

That all the stay-tubes be removed from the present boilers, and thick tubes used in their place.

That the steam-drums be omitted from the present arrangement of boilers.

That the boiler compartment be made an absolutely closed fire-room, and the combustion forced by means of revolving blowers, capable of maintaining not less than one inch of water pressure.

That the grates be fitted for the use of bituminous coals.

That there be included in the engine contract the three large steam-pumps, with all their valves, pipes, &c., connecting with the various compartments.

We are also of the opinion that the design of engine submitted by the Bureau of Steam Engineering for the Terror, Amphitrite, and Monadnock be adhered to, with the following amendments, which, although not absolutely essential, we are of the opinion will add to the efficiency of the machinery:

U. S. S. TERROR, AND CLASS.

It is desirable that the working platform be removed to the lower engine-room floor; it will allow the main working parts to be more accessible, and remove the necessity of the attendants constantly remaining in the hottest part of the engine compartment.

That the air and circulating pumps be combined according to the plans accompanying this, and if possible that there be two separate condensers, each with its own pumps.

That all stay-tubes be removed from the boilers, and the ordinary thick tubes substituted.

That the steam-drums be omitted from the spandrels of the boilers.

That the boiler compartment be made absolutely closed, and blowers fitted of sufficient capacity to maintain an air pressure equivalent to not less than one inch of water.

That the grates be designed for the use of bituminous coal.

That there be included in the engine contract the three large steam-pumps, with all their pipes, valves, &c., connecting with the various compartments.

We have, therefore, to recommend that the Bureau of Steam Engineering be authorized to prepare and print specifications embracing all the necessary work to complete the machinery of all these vessels ready for sea, with all details, as follows, viz:

That the contract for the engines embrace every detail connected therewith and all attachments thereto, with adjustable bladed steel screws, and also their connections to the present boilers and all their dependencies, as steam pumps (two) for engine-room and (two) for fire-room; for distillers and pump, ash hoister, steam pumps (three) for compartments, blowers, turning engines for screw shafts, separate condenser for all small engines and circulating pump therefor, all pump strainers, tinning of steam pipes, &c., ventilators, spare machinery, lagging and felt instruments, speaking tubes, and engine signal indicators, drip-pans, oil-tanks, and storerooms complete, steam-launch machinery, stores, painting, patent fees, and working drawings; in fact, that there be no extra bills, and any omission in the specifications of parts necessary to make the machinery complete will be fulfilled by the contractor without claim for additional compensation, and to be furnished this Board, with an estimate of the cost for each vessel, for final examination, as required by the act of Congress approved March 3, 1883, making appropriations for the naval service for the fiscal year ending June 30, 1884.

Very respectfully,

R. W. SHUFELDT,
Rear-Admiral, United States Navy, President of Board.
HENRY STEERS,
Naval Architect, Member.
MIERS CORYELL,
Marine Engineer, Member.
ALEXANDER HENDERSON,
Chief Engineer, United States Navy, Member.
J. A. HOWELL,
Commander, United States Navy, Member.
EDWARD W. VERY,
Lieutenant, United States Navy, Member.
F. L. FERNALD,
Naval Constructor, United States Navy, Member.

Hon. WILLIAM E. CHANDLER,
Secretary of the Navy.

[Inclosure D. Naval Advisory Board, October 25, 1883.]

NAVAL ADVISORY BOARD,
Washington, May 31, 1883.

SIR: Pursuant to our letter of the 17th instant, and after compliance with your verbal directions to consult with the Bureau of Steam Engineering as to the cost of completing the engines and machinery of

the double-turreted iron-clads, the Board respectfully reports the following estimates over and above the sums paid or to be paid to prepare the vessels for launching, and which we consider fair and reasonable compensation for completion of said machinery.

The amounts estimated for as hull-fittings chargeable to construction and repair are for compartment pumps, suctions, valves, &c., and turret blowers and duct connecting to fire-room, and for engine and shaft, keelsons, &c.

Name.	Engines, &c.	Hull-fittings.	Total.
Puritan	$363,495 56	$45,123 44	$408,619 00
Terror	175,540 00	33,172 32	208,712 32
Amphitrite	175,540 00	33,172 32	208,712 32
Monadnock	180,834 50	35,172 32	216,006 82
Total	895,410 06	146,640 40	1,042,050 46

Very respectfully,

R. W. SHUFELDT,
Rear-Admiral, United States Navy, President of Board.
HENRY STEERS,
Naval Architect, Member.
MIERS CORYELL,
Marine Engineer, Member.
ALEXANDER HENDERSON,
Chief Engineer, United States Navy, Member.
J. A. HOWELL,
Commander, United States Navy, Member.
EDWARD W. VERY,
Lieutenant, United States Navy, Member.
F. L. FERNALD,
Naval Constructor, United States Navy, Member.

Hon. W. E. CHANDLER,
Secretary of the Navy.

NAVAL ADVISORY BOARD,
Washington, June 1, 1883.

SIR: The Board respectfully states that a communication has been received from the Bureau of Steam Engineering, stating that a sum included in the Board's estimates for the Puritan, of the 31st ultimo, for erecting the boilers, &c., under the original contract is $7,786.55 instead of $6,195.56 as first reported to this Board; therefore, the Board requests that $1,590.99 be added to the Board's estimates for the machinery of the Puritan, of yesterday's date.

Very respectfully,

R. W. SHUFELDT,
Rear-Admiral, United States Navy,
President Naval Advisory Board.

Hon. W. E. CHANDLER,
Secretary of the Navy.

[Inclosure E. Naval Advisory Board, October 25, 1883.]

NAVAL ADVISORY BOARD,
Washington, June 15, 1883.

SIR: The Board respectfully acknowledge the receipt of the Department's letter of yesterday's date inclosing the proposed contracts for the completion of the engines and machinery of the double-turreted iron-clads Puritan, Terror, and Amphitrite. We find the specifications and requirements of the machinery in accordance with our report of the 5th April, 1883, and the terms of the contract in accordance with the estimates prepared by this Board and forwarded to the Department on 31st May, 1883; therefore the Board approves the terms of the contracts and considers them to the best advantage of the Government, fair and reasonable, according to the lowest market price for similar work.

Very respectfully,

R. W. SHUFELDT,
Rear-Admiral, United States Navy, President of Board.

Hon. W. E. CHANDLER,
Secretary of the Navy.

NAVY DEPARTMENT,
Washington, June 6, 1883.

The Department is prepared to contract with you to build the engines and machinery for the double-turreted iron-clad * * * in accordance with the act of Congress of March 3, 1883, and to pay you for building and erecting them on board the vessel completely ready for sea service in all respects, in accordance with the plans, specifications, and contract now prepared in the Bureau of Steam Engineering, the sum of $———.

Very respectfully,

WM. E. CHANDLER,
Secretary of the Navy.

The foregoing letter was addressed to John Roach, for the Puritan, $410,209.99; to the Harlan and Hollingsworth Company, for the Amphitrite, $208.712.32; to The William Cramp & Sons' Ship and Engine Building Company, for the Terror, $208,712.32.

(Copy of acceptance of each of foregoing parties annexed herewith.)

MORGAN IRON WORKS,
New York, June 7, 1883.

SIR: I am in receipt of your letter of 6th instant, advising me that the Department is prepared to contract with me to build the engines and machinery for the double-turreted iron-clad Puritan in accordance with the act of Congress of March 3, 1883, and to pay for building and erecting them on board the vessel completely ready for sea service in all respects, in accordance with the plans, specifications, and contract now prepared in the Bureau of Steam Engineering, the sum of $410,209.99. Although the price named is a considerable reduction from the amount in former contract, still, owing to the depressed condition of mechanical interests generally and the low price of material,

I accept the above sum and will examine and execute the contract. I seriously doubt, had materials advanced instead of declining, if the Department would have increased the amount of original contract.

Yours, very respectfully,

JOHN ROACH.

Hon. WM. E. CHANDLER,
Secretary of the Navy.

THE HARLAN AND HOLLINGSWORTH COMPANY,
Wilmington, Del., June 7, 1883.

DEAR SIR: We are in receipt of your favor of yesterday, advising us that you were willing to enter into a contract with us to build the engines and machinery for the double-turreted iron-clad Amphitrite for the sum of $208,712.32, and that the papers were ready in the Bureau of Steam Engineering. In reply to this, have to say that we have decided to accept your offer, and will take an early opportunity to examine the papers in question and sign the contract.

Very respectfully,

J. TAYLOR GAUSE,
President.

Hon. WM. E. CHANDLER,
Secretary of the Navy, Washington, D. C.

THE WILLIAM CRAMP & SON'S
SHIP AND ENGINE BUILDING COMPANY,
Philadelphia, June 9, 1883.

DEAR SIR: Your offer of June 6th, of $208,712.32 to build the engines and machinery for the double-turreted iron-clad Terror, is accepted.

Yours truly,
THE WM. CRAMP & SONS' SHIP AND BUILDING COMPANY,
CHAS. H. CRAMP,
President.

Hon. WM. E. CHANDLER,
Secretary of the Navy, Washington, D. C.

ADDITIONAL CRUISERS.

NAVAL ADVISORY BOARD,
Washington, October 25, 1883.

SIR: In response to your verbal request for an expression of opinion by this Board with regard to the types and number of vessels which should be commenced at once, in order to carry forward the work of reconstruction of the unarmored fleet, we have the honor to submit the following remarks and approximate estimates for your consideration:

The rapid deterioration of the vessels composing the present fleet makes it necessary that the work of reconstruction should be carried forward constantly and as rapidly as the demands of proper economy in expenditure will permit, in order that, as the old ships are condemned *and withdrawn* from service, new ones may be available with which to

replace them. In undertaking this work of a complete reconstruction of the fleet, every type and size of vessel which it is proposed to introduce should be carefully studied and decided upon in order that the general result may represent the highest development of efficiency and compactness. To secure these results the types and gradations in size should be few in number and distinct from each other, and whilst each vessel should possess qualities rendering her adaptable to a wide range of service both in peace and war, the gradations should be such as to develop some one of the main requirements to its fullest extent, so that the fleet may be prepared to deal thoroughly with every exigence of naval service.

It is considered that in the commencement of this reconstruction at least one of the vessels of each final type and size should be designed and built, in order that as the work progresses an equal amount of improvement due to work and experience may be realized in all.

There are now in course of construction three of the distinct types and sizes of steel unarmored cruisers of which the fleet will be entirely composed. Of these the Chicago is a representative of the fully equipped cruising fighting vessel, with qualities of speed, endurance, battery power, and handiness carried to the maximum of development permissible without gaining in one at the expense of the other. Her size is at the limit which is considered the test for the full attainments of these qualities, due consideration being given to the question of economy in construction and maintenance. The vessels of this type will replace those of the Wabash, Tennessee, and Trenton types in the old fleet, gaining greatly in power, efficiency, and compactness by the improvements and consolidation. The experience gained in the completion of the design of the Chicago, and the necessity for the early acquirement of more vessels of this description, have led the Board to recommend the immediate construction of one ship of this class and type.

The following is the probable cost of construction and outfit:

Hull	$650,000
Machinery	350,000
Ordnance	225,000
Equipment	70,000
Total	1,295,000

Although the Chicago represents the maximum of unarmored fighting efficiency, her cost of construction and maintenance limit the number which can be built and the general active cruising capacity. For this reason the Boston and Atlanta were designed, which, by an alteration in the type, made necessary by the restrictions in the dimensions, maintain a combination of fighting and cruising qualities approximating closely to those of the Chicago at a much reduced cost. This type of ships replaces the two types of the old fleet represented by the Hartford and Omaha, whose service records give the best possible evidence of the great efficiency and absolute necessity of this size of vessels in an unarmored fleet.

We recommend that one more vessel of this type be commenced at once, the following being the estimates of the probable cost of construction and outfit:

Hull	$450,000
Machinery	260,000
Ordnance	168,000
Equipment	58,000
Total	936,000

The Dolphin has no counterpart in the constitution of the old fleet,

in consequence of which much misunderstanding exists with regard to her value. Her type is considered a very necessary auxiliary to the naval fighting force for duties requiring lightness and speed, which could not be performed economically by vessels composing the main body of the fleet. Of even greater importance, however, is the fact that this vessel serves as a basis from which to develop the pure type of lightly-armed, high-speed, economically-maintained commerce destroyers. As this ship will stand when completed she will be very effective in this respect, although her normal fleet-service is of a different nature. The especial features developed in this vessel, and the requirements of the fleet brought about by the length and position of our coast lines, lead the Board to recommend that a second vessel of this type and size be commenced at once, the following being the estimates of the cost of construction and outfit:

Hull	$232,000
Machinery	175,000
Ordnance	50,000
Equipment	25,000
Total	482,000

In the Dolphin actual working and fighting qualities are sacrificed in order to obtain fully the maximum speed and endurance consistent with her size. It is considered that for the proper and economical performance of the multifarious duties of general cruising, survey, exploration, &c., in time of peace, and convoy, blockade, and squadron cruising in time of war, a different type of vessel of the same size as the Dolphin should be introduced. These vessels would replace those of the Juniata, Wachusett, and Essex types in the old fleet, gaining by the perfection of their design greatly increased efficiency for the general work required, whilst similarity of type throughout the class would render them cheaper in general maintenance and more compact and effective for combined work.

The Board recommends that steps be taken to design and construct at once two vessels of this type. The following will be the probable cost of each:

Hull	$216,000
Machinery	175,000
Ordnance	100,000
Equipment	25,000
Total	516,000

It is the opinion of the Board that no fleet can be thoroughly efficient that does not possess a number of vessels suitable for navigating shallow waters, that is to say, whose maximum draught of water is not over 9 feet. At the same time these vessels must be sea-going craft, since an important part of their work would be performed in foreign waters.

Like the larger vessels, these gun-boats must possess good fighting and working power. To obtain these qualities it is considered that the greatest size compatible with a draught of 9 feet of water and good sea-going ability is about 750 tons.

The Board recommend that steps be taken to provide for the immediate construction of two of these vessels, the following being the estimates of the cost of construction and outfit of each:

Hull	$132,000
Machinery	77,000
Ordnance	40,000
Equipment	20,000
Total	269,000

Owing to the complete isolation of the Pacific coast from that of the eastern side of the United States, it is evident that for complete and efficient working the fleet must be separated into two distinct divisions, and facilities for construction, maintenance, and repair on the Pacific side should be sufficient to render vessels operating on that coast and in Asiatic waters quite independent of Eastern yards.

In order that ship and engine building may be cultivated on that coast and that sufficient inducements may be held out to people to establish factories, it is strongly recommended that, if possible, the vessel of the Dolphin type and one of the gun-boats recommended should be built and fitted out on that side.

The following is the summary of the recommendations of the Board for immediate construction:

Type.	Displacement.	Number to be built.	Total cost.
	Tons.		
Chicago	4,500	1	$1,295,000
Boston	3,000	1	936,000
Dolphin	1,500	1	482,000
Heavy-armed cruising gun-boat	1,500	2	1,032,000
Light-draught gun-boat	750	2	538,000
Total	13,500	7	4,283,000

In concluding the report the Board deems it necessary to record its emphatic disapproval of the suggestions that have of late been so frequently made throughout the country, that the Navy should acquire a number of extremely high-speed commerce-destroying vessels of great endurance, designed in these respects with special reference to gaining superiority over the large and swift transatlantic mail steamers. The main reasons for this disapproval are as follows:

In order that a competitive vessel should excel in speed and endurance the best of these fast packets, she must certainly cost as much to build and be of nearly as great dimensions, necessitating a displacement of at least 11,000 tons. Once built, these vessels would be so costly in maintenance, so limited in maneuvering power and scope of effective service, owing to the great dimensions, especially the draught, and they would absorb for their control such a large proportion of the *personnel* of the Navy, that active service could only be warranted by the most urgent necessity for special work. Such a necessity would under no conditions arise in time of peace, which is the normal state of the nation. To warrant them, then, their special service in time of war must be one certain to occur, and one that could not be performed by other vessels. Now these extremely high-speed packets make up far less than the one-hundredth part of the ocean-steamer tonnage of the world, either in number or value. Even if this hundredth part were considered of sufficient importance for the special consideration, it is absurd to suppose that such valuable material would, in time of war, maintain their ordinary commercial methods and lines of travel. The ease with which they could secure immunity by transfer to a neutral flag, the security which could, and undoubtedly would, be furnished through convoy or an entire suspension of service or alteration of traffic, are considered to furnish the best grounds possible for leaving them out of account in laying down the elements of fleet-construction.

The vulnerable commerce of the enemy, and the one which, if struck, will cause the greatest disaster, is the great bulk of the slow or mode-

rate speed steamers; vessels with which ships of the Dolphin class are thoroughly competent to deal under any or all circumstances. Such being assuredly the case, it seems conclusive that since for the cost of one of these immense vessels eight of the Dolphin class could easily be built and kept at sea, no plausible reason exists for the introduction of the type into the service. The cost of building and fitting out one of these very large vessels would be at least as great as that of all seven of the ships we have recommended.

Very respectfully,

R. W. SHUFELDT,
Rear-Admiral, United States Navy, President of the Board.
HENRY STEERS,
Naval Architect, Member.
MIERS CORYELL,
Marine Engineer, Member.
ALEX. HENDERSON,
Chief Engineer, United States Navy, Member.
J. A. HOWELL,
Commander, United States Navy, Member.
EDWARD W. VERY,
Lieutenant, United States Navy, Member
F. L. FERNALD,
Naval Constructor, United States Navy, Member.

Hon. W. E. CHANDLER,
Secretary of the Navy.

ESTIMATE OF THE REQUIRED STRENGTH OF AN UNARMORED CRUISING FLEET.

[Extract from the report of the First Advisory Board, November 7, 1881.]

THE NUMBER OF UNARMORED VESSELS NOW TO BE BUILT.

The first step taken by the Board, in its determination of the number of vessels that should now be built, was to thoroughly investigate the present condition of the fleet; the number of vessels in service in the squadrons; the number of vessels in reserve available for relief; the estimated life-time of the vessels; the cost of putting them in condition for active service, and their comparative efficiency as measured by their speed, armament, size, &c.

In this manner a knowledge of the number of vessels now available was obtained, and it was found that of 61 unarmored cruising vessels now on the Navy list (torpedo vessels, dispatch vessels, tugs, and sailing vessels excluded) but 32 either are available, or can be made so at a cost low enough to warrant the expenditure. Of these 32 vessels, 24 are at present in commission in the squadrons, leaving a reserve of 8 for the relief of ships requiring repair, &c., or 25 per centum of the whole number, while throughout the world it is recognized that, in order to keep up the strength of a wooden fleet, a reserve of 50 per centum is necessary.

It is the opinion of the Board that, taking into proper consideration the various requirements of the different squadrons for surveying, deep-sea sounding, the protection and advancement of American commerce, exploration, the protection of American life and property endangered by wars between foreign countries, and service in support of American

policy in matters where foreign governments are concerned, 43 unarmored cruising vessels are required constantly in commission, or 12 more than are possibly available now in case of the most urgent necessity both in commission and in reserve. Increasing this number by 50 per centum, in order to obtain a reserve of sufficient strength to maintain the effectiveness of the fleet, a total of 65 vessels is obtained, which would be sufficient, were it not for the fact that the present condition and limited life time of some of the vessels included will soon weaken the number very materially. To allow for this loss, it is the opinion of the Board that 5 more vessels should be added, giving a total number necessary to perform efficiently the work of the Navy at present of 70 vessels.

Taking from this the 32 vessels now available, the Board is of the opinion that 38 unarmored cruising vessels should now be built.

THE CLASS, SIZE, AND DISPLACEMENT.

In determining the class, size, and displacement of the unarmored vessels to be recommended, the Board is of the opinion that the first quality necessary to be developed, in order that a vessel shall be thoroughly efficient, is the capability of maintaining a high rate of speed at sea for a protracted period.

The Board decided that, in estimating the proper speed allowance for vessels, what is commonly known as maximum speed, or speed in smooth water on the measured mile, should not be considered, as such a basis is a deceptive one; but that the speed recommended should be the *average speed at sea* that the vessel would be capable of making under full power.

In order that a high rate of speed may be maintained at sea, a great weight of machinery is necessary, and also a great amount of space in the holds of the vessel. These demands alone place a limit upon the minimum displacement of the ship; while, on the other hand, the necessity of keeping within bounds in the draught of water of the ship, and of restricting the length and other measurements to limits that will permit a proper amount of handiness in maneuvering power, places a limit upon the maximum displacement, and consequently upon the speed.

It is the opinion of the Board that the maximum sea-speed that can be recommended as the measure of the size of the largest class of vessels is fifteen knots per hour.

Since the necessities of the service demand a class of vessels that should not draw over nine and one-half feet of water, and since a sea-speed of ten knots per hour is the greatest that can be depended upon with this draught (other qualities being given due weight), it is the opinion of the Board that ten knots should be recommended as the minimum sea-speed in measuring the sizes of vessels.

The Board is of the opinion that classes of vessels represented by sea-speeds of thirteen and fourteen knots are very useful in time of peace and of the greatest possible value in time of war, and that such vessels should now be built.

The sizes of the wooden vessels now in service and available correspond to sea-speeds of eleven and twelve knots. These speeds are not considered by the Board as efficient ones for war service; nor are these vessels capable of maintaining it as a rule. Still, the classes which they represent are excellent for ordinary service-work, and are more fully represented in foreign navies than the higher ones. (See tabulated statement of foreign unarmored vessels appended, p. 108.)

It is the opinion of the Board that the classes should be perpetuated

by replacing these vessels as they wear out with modern vessels that shall be fully equal to the speed requirements. There is now, however, a sufficient number of vessels of these classes available for the duty required of them, and the Board does not recommend the building of any more at present.

The Board is of the opinion that the interests of efficiency and economy will best be satisfied in recommending that, of the 38 unarmored cruisers to be built, 2 should be 15-knot vessels of about 5,873 tons displacement; 6 should be 14-knot vessels of about 4,560 tons displacement; 10 should be 13-knot vessels of about 3,042 tons displacement; 20 should be 10-knot vessels of about 793 tons displacement.

Memorandum of the Naval Advisory Board.

NAVAL ADVISORY BOARD,
Washington, November 21, 1882.

SIR: The Naval Advisory Board recommends to the honorable the Secretary of the Navy that there be constructed, in addition to the two cruisers already authorized to be built, two of the ten second-rate, single-decked, steel, unarmored cruisers recommended by the late Naval Advisory Board, the displacement being limited, however, to about 2,500 tons each, with a speed of not less than 13 knots, and at a cost each—

To construction	$425,000
To engines	285,000
To ordnance	164,825
To equipment	50,000
Total	924,825

The battery to consist of eight 6-inch breech-loading rifled guns and six revolving guns.

We might also recommend for construction one ram, of the five steel rams suggested by the late Naval Advisory Board, the displacement to be about 2,000 tons with a sea speed of 13 knots, at a cost each—

To construction	$350,000
To engines (twin-screw)	300,000
To equipment	20,000
To torpedo outfit (if fitted)	51,000
Total	721,000

The Board is, however, of the opinion that the construction of a ram is not indispensably necessary, except under prospect of war. The ram is of no use in time of peace, and can be built within ninety days, or readily improvised from another vessel in emergency.

The Board advises that a ram should be designed to provide against the contingency above referred to.

Also one dispatch boat, of about 1,500 tons displacement, to be built of iron, with double bottom, with speed of not less than 15 knots, at a cost—

To construction	$230,000
To engines	175,009
To ordnance	30,000
To equipment	25,000
Total	460,000

To be armed with one 6-inch breech-loading rifled and four Hotchkiss guns.

The Board, however, suggests that in place of calling this vessel a "dispatch boat" she should be designated a "clipper."

The Board is of the opinion that the construction of a torpedo and gun boat, with a displacement of 450 tons and a speed of 13 knots, as recommended by the late Naval Advisory Board, is not practicable.

The Board would advise the purchase of one "cruising torpedo boat" 100 feet long, with a maximum speed of 21 knots, at a cost of $38,000, and in place of the torpedo gun-boat, the "dispatch boat" or "clipper" be duplicated, as this is considered a most useful type in war or peace.

Very respectfully, your obedient servant,

R. W. SHUFELDT,
Commodore, United States Navy, President of the Board.

Hon. W. E. CHANDLER,
Secretary of the Navy.

NAVAL ADVISORY BOARD,
Washington, December 20, 1882.

SIR: The Naval Advisory Board respectfully recommends the building of one steaming cruising vessel of steel, about four thousand tons displacement, not to be cased with wood, and of two-thirds full sail power; to be armed with four 8-inch breech-loading rifles, and ten 6-inch breech-loading rifles, with machine guns.

ESTIMATES.

Load displacement ..... tons..	4,250
Cost:	
To hull	$828,000
To machinery	448,000
To ordnance	224,854
To equipment	76,000
Total	1,576,854

The Board also recommends the building of three single-deck steel cruisers, of about 2,500 tons displacement, not to be cased with wood, of two-thirds full sail power; to be armed with two 8-inch breech-loading rifles, and nine 6-inch breech-loading rifles, and machine guns.

ESTIMATES.

Load displacement ..... tons..	2,750
Cost:	
To hull	$507,000
To machinery	297,500
To ordnance	168,725
To equipment	58,000
Total for each	1,031,225
Total for three	3,093,675

Also one dispatch vessel or "clipper,"* to have a sea speed of fifteen knots, to be built of iron, and be armed with one 6-inch breech-loading rifle and four revolving guns.

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*Two of these vessels are desirable.

ESTIMATES.

Load displacement	tons..	1,500
Cost:		
To hull		$230,000
To machinery		175,000
To ordnance		30,000
To equipment		25,000
Total		460,000
Also one cruising torpedo boat, 100 feet long, at a cost of		38,000
Total amount estimated for		5,168,529

Very respectfully, your obedient servant,

R. W. SHUFELDT,
Commodore, United States Navy,
President of the Board.

Hon. W. E. CHANDLER,
Secretary of the Navy.

MEMORANDA OF THE NAVY-YARD COMMISSION.

UNITED STATES FLAGSHIP NEW HAMPSHIRE,
Newport, R. I., June 6, 1883.

SIR: The Commissioners on Navy-Yards have the honor to submit herewith, agreeably to your request, the following memoranda on the reorganization of the navy-yards, and the disposition proposed to be made of each yard.

Very respectfully, your obedient servant,

S. B. LUCE,
Commodore, United States Navy, President Commission.

Hon. WM. E. CHANDLER,
Secretary of the Navy.

MEMORANDA.

We recommend a reorganization and concentration of the mechanical departments in every navy-yard, so that there shall be but one shop in each for the performance of the same class of work. This involves the following changes: The abolition of all shops doing the usual work of machine shops, all coppersmith, all boiler shops and all foundries except those of steam engineering. Also of all joiner and all paint shops except those of construction.

We also recommend such a concentration of work, that each of the several articles that form a part of the outfit of every ship shall be made in a single shop, to be established in such yard as may have the best facilities and conveniences therefor. Some of the principal articles being boats, blocks, bags, hammocks, tarpaulins, steam-cutter machinery, engine and boiler mountings, gun-carriages and gun-fittings.

We also recommend that whenever there is not, as at present, sufficient work to warrant the expense of maintaining separate shops, all plumbing and iron-plating work be transferred to the coppersmith, machine and boiler shops of Steam Engineering.

We recommend, further, that at each yard a central steam generating establishment be erected, which shall furnish steam for all motive power,

and for heating purposes; a great reduction in the cost of fuel and of attendance will unquestionably be secured thereby, as well as greater convenience and efficiency.

MARE ISLAND YARD.

We consider it absolutely necessary that the Mare Island navy-yard be retained in full operation, it being the only workshop of the Government on the Pacific coast, and submit the following table, showing the foremen, &c., now employed and those required if our recommendations are adopted:

YARDS AND DOCKS.

Present organization.	Per diem.	Proposed organization.	Per diem.
General foreman		Establish	$5 00
Superintendent machinery	$5 00	Abolish (steam engineering).	
Quarterman machinist	4 50	Abolish (steam engineering).	
Foreman joiner	5 00	Abolish (construction).	
Foreman mason	5 00	Retain (while on dry dock)	5 00
Foreman laborer	5 00	Retain	4 50
	$24 50		$14 50

CONSTRUCTION.

Master carpenter	$6 00	Retain	$6 00
Master joiner	6 00	Retain	6 00
Master smith	6 00	Retain	6 00
Master spar-maker	6 00	Retain	6 00
Master block-maker	6 00	Retain	6 00
Master boat-builder	6 00	Retain	6 00
Master painter	6 00	Retain	6 00
Master calker	6 00	Retain	6 00
Master laborer	4 80	Retain	4 80
Quarterman carpenter	5 76	Retain	5 76
Quarterman carpenter	5 76	Retain	5 76
Leading joiner	4 74	Retain	4 74
Sawyer in charge	5 50	Retain	5 50
Foreman iron-plater	6 00	Abolish (steam engineering).	
Quarterman iron-plater	4 76	Abolish (steam engineering).	
Master plumber	6 00	Abolish (steam engineering).	
Superintendent dry-dock	6 00	Retain	6 00
	$97 32		$80 56

STEAM ENGINEERING.

Foreman machinist	$5 75	Retain	$5 75
Foreman machinist (afloat)	5 75	Retain	5 75
Foreman pattern-maker	5 75	Retain	5 75
Foreman boiler-maker	5 75	Retain	5 75
Foreman molder	5 75	Retain	5 75
Foreman coppersmith	5 75	Retain (coppersmith and plumber	5 75
Foreman blacksmith	5 75	Abolish (construction).	
	$40 25		$34 50

EQUIPMENT AND RECRUITING.

Foreman sailmaker	$4 90	Retain	$4 90
Quarterman rigger	4 50	Retain	4 50
	$9 40		$9 40

ORDNANCE.

Has no foreman at present.

Total daily pay at present	$171 47	Total daily pay proposed	$138 96

PENSACOLA YARD.

We advise that the Pensacola yard be closed. Should this be done, the following organization will be sufficient for the preservation of the yard and the property therein:

YARDS AND DOCKS.

General foreman	$5 00
Quarterman laborer	2 25

CONSTRUCTION.

Quarterman carpenter	$4 25

STEAM ENGINEERING.

Quarterman machinist	4 25
Total daily pay proposed	$15 75

NORFOLK YARD.

We advise that the Norfolk navy-yard be retained in first-class working condition, suggesting, in accordance with our proposition for the concentration of work, the following changes in the personnel of foremen and other superintendents:

YARDS AND DOCKS.

Present organization.		Proposed organization.	
General foreman.		Establish	$5 00
Foreman mason	$5 00	Abolish.	
Foreman house-joiner	5 00	Abolish (construction).	
Foreman laborer	4 50	Retain	4 50
Quarterman hod-carrier	3 00	Abolish.	
	$17 50		$9 50

CONSTRUCTION.

Master carpenter	$5 50	Retain	$5 50
Master joiner	5 00	Retain	5 00
Master smith	5 00	Retain	5 00
Master spar-maker	5 00	Retain	5 00
Master painter	5 00	Retain	5 00
Master laborer	5 00	Retain	5 00
Master calker	5 00	Retain	5 00
Engineer in charge	4 00	Abolish.	
Quarterman ship-keeper	3 00	Retain	3 00
Quarterman joiner	3 76	Retain	3 76
Quarterman laborer	2 26	Retain	2 26
Quarterman laborer	2 26	Retain	2 26
Timber inspector	4 50	Retain	4 50
Master iron-plater	5 00	Abolish (steam engineering).	
Quarterman iron-plater	3 76	Abolish (steam engineering).	
Master plumber	5 00	Abolish (steam engineering).	
Master boat-builder	5 00	Retain, if not at any other yard.	5 00
Master block-maker	5 00	Retain, if not at any other yard.	5 00
	$79 04		$61 28

STEAM ENGINEERING.

Superintendent machinery	$6 50	Retain	$6 50
Quarterman machinist	3 50	Retain	3 50
Quarterman machinist	3 50	Retain	3 50
Quarterman pattern-maker	3 50	Retain	3 50
Foreman molder	5 00	Retain	5 00
Foreman boiler-maker	5 25	Retain	5 25
Quarterman boiler-maker	3 50	Retain	3 50
Foreman coppersmith.		Estab.(coppersmith and pinmber)	5 00
	$30 75		$35 75

EQUIPMENT AND RECRUITING.

Foreman sailmaker	$5 00	Retain	$5 00

ORDNANCE.

Has no foreman at present.

Total daily pay at present	$132 29	Total daily pay proposed	$111 53

WASHINGTON YARD.

We advise that the Washington yard be dropped from the list of navy-yards, but, under the designation of naval arsenal, retained in full working condition for the manufacture of specialties under the Bureaus of Equipment and Ordnance; sheet copper under Construction, and standard articles under Steam Engineering. The following changes, in accordance with the above suggestions, in the personnel are submitted:

YARDS AND DOCKS.

Present organization.		Proposed organization.	
General foreman.		Establish	$5 00
Quarterman joiner	$3 50	Retain	3 50
Quarterman painter.		Establish	3 50
Quarterman laborer	3 50	Retain	3 50
Special quarterman	4 00	Abolish.	
	$11 00		$15 50

CONSTRUCTION.

Master carpenter	$5 00	Abolish.	
Quarterman carpenter	3 76	Abolish.	
Quarterman joiner	3 76	Abolish (yards and docks).	
Quarterman painter	3 51	Abolish (yards and docks).	
Quarterman calker	3 51	Abolish.	
Superintendent copper-mills	5 00	Retain	$5 00
Master laborer	4 00	Abolish.	
Master iron-plater	5 00	Abolish (steam engineering).	
Engineer in charge	4 00	Abolish.	
Quarterman smiths	3 76	Abolish (equipment).	
	$41 30		$5 00

STEAM ENGINEERING.

Superintendent machinery	$6 50	Retain	$6 50
Foreman pattern-maker	5 25	Retain	5 25
Foreman iron foundry	5 25	Retain	5 25
Foreman boiler-maker	5 25	Retain	5 25
Foreman machinist (2d class)	4 50	Abolish.	
	$26 75		$22 25

EQUIPMENT.

Foreman sailmaker	$5 00	Retain (if for special work)	$5 00
Foreman smiths	5 00	Retain	$5 00
Foreman galley-makers	6 00	Retain	6 00
Sup't forge and anchor shop	5 00	Retain	5 00
	$21 00		$21 00

ORDNANCE.

Foreman ordnance	$6 00	Retain	$6 00
Quarterman ordnance	4 00	Retain	4 00
	$10 00		$10 00
Total daily pay at present	$110 05	Total daily pay proposed	$73 75

LEAGUE ISLAND YARD.

We recommend that League Island yard be closed, both as a yard and as a naval station, until plans have been prepared and approved for such a yard as the Department requested authority to construct and Congress authorized, and until the filling, the construction of the quay walls, and the gateways to the great ship-basin in the back channel are completed.

The present plans contemplate the construction of exactly what the Department declared it did not want, viz, another similar yard to those it then possessed, whereas the Department demanded authority to build a great iron-shipbuilding and iron-manufacturing yard only. This change of plan necessarily involves the expenditure of an enormous sum of money for improvements that are not required, as they exist in other yards. Such an expenditure cannot therefore be justified.

We consider the site too valuable and desirable to be abandoned, and do not believe that similar or equal accommodations can be procured elsewhere at a lower cost. We believe no better locality than the Delaware River can be found for the purpose for which the site was selected, and therefore recommend the completion of this yard on the original basis; but we are also unanimously of the opinion that it is totally unfit for an ordinary or small yard, and that if the original plan is to be abandoned the island should be also.

PRESENT ORGANIZATION.

YARDS AND DOCKS.

Foreman joiners	$5 0
Foreman laborers	4 5
	$9 5

CONSTRUCTION.

Master carpenter	5 5
Master joiner	5 0
Master iron-plater	5 0
Master plumber	5 0
Master painter	5 0
Master boat-builder	5 0
Master block-maker	5 0
Master calker	5 0
Master spar-maker	5 0
Master laborer	4 0
Quarterman shipsmith	4 0
Quarterman shipwright	4 0
	$57 5

STEAM ENGINEERING.

Foreman machinists	$5 9
Foreman foundry	4 5
	10 4
Total daily pay at present	$77 4

Should it be determined to close this yard the following organization will be required:

YARDS AND DOCKS.

General foreman	$5 0
Quarterman laborers	2 3

CONSTRUCTION.

Quarterman carpenter	$3 5

STEAM ENGINEERING.

Quarterman machinist	$3 5
Total daily pay proposed	$14 3

NEW YORK YARD.

We advise that the New York yard be retained as a first-class yard; but that no further expenditures be made thereon, until plans for the full development of the yard shall have been prepared and approved. These plans should include the improvement of the Wallabout Channel and the utilizing of the cob-dock for the purposes of a wet basin.

We submit a table showing present and proposed list of foremen, &c. In the latter we have omitted those foremen of trades which we are of the opinion should be carried on at one yard only, not for the purpose of indicating that they should not be established here, but simply to make the total amount of proposed pay correct:

YARDS AND DOCKS.

Present organization.		Proposed organization.	
General foreman		Establish	$5 00
Foreman masons	$5 00	Abolish.	
Foreman joiners	5 00	Abolish (construction).	
Foreman laborers	4 50	Retain	4 50
Superintendent of teams	4 70	Abolish.	
	$19 20		$9 50

CONSTRUCTION.

Master carpenter	$5 50	Retain	$5 50
Quarterman carpenter	4 26	Retain	4 26
Quarterman carpenter	4 26	Retain	4 26
Superintendent saw-mill	4 00	Retain	4 00
Master joiner	5 00	Retain	5 00
Master smith	5 00	Retain	5 00
Master iron-plater	5 00	Abolish (steam engineering).	
Master spar-maker	5 00	Retain	5 00
Master boat-builder	5 00	Abolish.	
Master painter	5 00	Retain	5 00
Master plumber	5 00	Abolish (steam engineering).	
Engineer in charge	4 00	Retain	4 00
Master laborer	4 00	Retain	4 00
Quarterman laborer	2 76	Retain	2 76
Master caulker	5 00	Retain	5 00
Superintendent oakum-mill	4 00	Retain	4 00
Shipkeeper in charge	3 00	Retain	3 00
Master block-maker	5 00	Abolish.	
	$80 78		$60 78

STEAM ENGINEERING.

Foreman machinist	$5 26	Retain	5 26
Foreman machinist (outside)	5 26	Retain	5 26
Foreman pattern-maker	5 00	Retain	5 00
Foreman boiler-maker	5 26	Retain	5 26
Foreman molder	5 00	Retain	5 00
Foreman coppersmith	5 00	Retain (coppersmith and plumber)	5 00
	$30 78		$30 78

EQUIPMENT AND RECRUITING.

Foreman sailmaker	$5 00	Retain	$5 00

ORDNANCE.

Has no foreman at present.

Total daily pay at present	$135 76	Total daily pay proposed	$106 06

NEW LONDON NAVY YARD.

We advise that the New London yard be dropped from the list of navy-yards and naval stations, and the stores and material sent to other yards.

We recommend further that arrangements be made for the transfer of the Naval Asylum to the vacated site on the Thames.

BOSTON AND PORTSMOUTH YARDS.

Some differences of opinion exist in the Commission in regard to the disposition to be made of these yards. All agree that the navy-yard at Portsmouth is indefensible against a serious attack from a fleet of iron-clads armed with modern rifled ordnance, unless new and extensive fortifications should be erected for that purpose, the cost of which would be so enormous as to preclude the consideration of such an expedient. Even then it would be so vulnerable to attack, from a force landed to the eastward of the yard, that it would require for its defense an equal force. As a consequence we recommend that no farther expenditures be made thereon for improvements of any kind.

All agree that it would be difficult to overestimate the importance of the Boston yard in time of war, and that it should be so improved as to utilize the water frontage to its utmost extent and at the earliest moment. No expenditures for fortifications would be required for its defense beyond those demanded for the protection of the city itself. All agree that any proposal to dispose of this magnificent property cannot be too strongly condemned. All agree that the rope-walk should be kept in operation, and that in view of this fact and of the superior quality of the painted canvas goods made at this yard, the sail-making department should be kept in operation for the manufacture of tarpaulins and other similar articles for the entire Navy.

A difference of opinion exists as to the immediate disposition to be made of these yards; two members believe that the yard at Portsmouth should be closed; one member believes that the yard at Boston should be retained in active operation; one member considers it important to keep Portsmouth navy-yard open for the reception and refitting of ships returning from southern stations; and that any repairs needed by wooden ships can be made there as well and as cheaply as at any other yard. But he concurs with the other members of the Commission that its importance and value for ship-building have passed away, and that it must be closed whenever the necessity for the repair of wooden vessels ceases. In case it should be decided that no necessity exists for a yard as a sanitary station, he recommends that it be closed. The same member and another believe that no necessity exists that would justify the use of the Boston yard as a construction and repair yard in time of peace.

The Boston yard will require the following organization of foremen, &c., if kept in working condition:

YARDS AND DOCKS.

Present organization.		Proposed organization.	
General foreman		Establish	$5 00
Foreman mason	$5 00	Abolish.	
Foreman joiner	5 00	Abolish (construction).	
Foreman machinist	5 00	Abolish (steam engineering).	
Foreman painter	5 00	Abolish (construction).	
Foreman laborer	4 50	Retain	4 50
	$24 50		$9 50

CONSTRUCTION.

r carpenter	$5 50	Retain	$5 50
r joiner	5 00	Retain	5 00
r smith	5 00	Retain	5 00
r iron-plater	5 00	Abolish (steam engineering).	
r spar-maker	5 00	Retain	5 00
r boat-builder	5 00	Abolish.	
r painter	5 00	Retain	5 00
r block-maker	5 00	Abolish.	
r plumber	5 00	Abolish (steam engineering.	
r calker	5 00	Retain	5 00
r molder	5 00	Abolish, (steam engineering)	
r laborer	4 00	Retain	4 00
erman carpenter	3 76	Retain	3 76
erman cooper	4 00	Abolish.	
r inspector	4 50	Retain	4 50
eeper in charge	3 00	Retain	3 00
	$74 76		$45 76

STEAM ENGINEERING.

an machinist	$5 26	Retain	$5 26
an machinist (outside)	5 26	Retain	5 26
an pattern-maker	5 00	Retain	5 00
an boiler-maker	5 26	Retain	5 26
an blacksmith	5 00	Abolish (construction).	
an molder	5 00	Retain	5 00
an coppersmith	5 00	Retain (coppersmith and plumber).	5 00
	$35 78		$30 78

EQUIPMENT.

an sailmaker	$5 00	Retain	$5 00
an machinist	5 00	Abolish (steam engineering).	
an rope-maker	5 00	Retain	5 00
rman rope-maker	3 76	Retain	3 76
	$18 76		$13 76

l daily pay at present.....$153 80 Total daily pay proposed.....$99 80

his yard is closed, with the exception of the equipment depart- the following should be the organization:

YARDS AND DOCKS.

l foreman	$5 00
an laborers	4 50
rman masons	3 76
	$13 26

CONSTRUCTION.

rman carpenter	$3 76
eeper in charge	3 00
	$6 76

STEAM ENGINEERING.

rman machinist	$3 76

EQUIPMENT.

an sailmaker (if tarpaulin, &c., are made here)	$5 00
rman machinist	3 76
an rope-maker	5 00
rman rope-maker	3 76
	$17 52
Total daily pay proposed	$40 54

M.

If the Portsmouth yard is retained in working order, the following table will show the changes that should be made:

Present organization.		Proposed organization.	
YARDS AND DOCKS.			
General foreman.		Establish	$5 00
Foreman laborers	$4 00	Retain	4 00
Foreman machinist	4 00	Abolish (steam engineering).	
	$8 00		$9 00
CONSTRUCTION.			
Superintendent dry-dock	$4 00	Retain	$4 00
Timber inspector	3 50	Retain	3 50
Master carpenter	5 50	Retain	5 50
Master caiker	5 00	Retain	5 00
Master plumber	5 00	Abolish (steam engineering).	
Master brass-molder	5 00	Abolish (steam engineering).	
Master boat-builder	5 00	Abolish.	
Master iron-plater	5 00	Abolish (steam engineering).	
Master painter	5 00	Retain	5 00
Master spar-maker	5 00	Retain	5 00
Master joiner	5 00	Retain	5 00
Master laborer	4 00	Retain	4 00
Master shipkeeper	3 00	Retain	3 00
	$60 00		$40 00
STEAM ENGINEERING.			
Foreman machinist	$5 26	Retain	$5 26
Foreman machinist (outside)	5 26	Retain	5 26
Quarterman machinist	3 50	Abolish.	
Leading machinist	3 24	Abolish.	
Foreman pattern-maker	5 00	Retain	5 00
Foreman boiler-maker	5 25	Retain	5 25
Foreman blacksmith	5 00	Abolish (construction).	
Foreman molder	5 00	Retain	5 00
Foreman coppersmith	5 00	Retain (coppersmith and plumber).	5 00
Foreman laborer	3 00	Abolish.	
Quarterman laborer	2 50	Abolish.	
	$48 01		$30 77
Total daily pay at present	$112 75	Total daily pay proposed	$79 77

Should it be determined to close the yard, the following organization will be required:

YARDS AND DOCKS.	
General foreman	$5 00
Foreman laborer	4 00
Quarterman masons	3 76
	$12 76
CONSTRUCTION.	
Quarterman carpenter	$3 76
Shipkeeper	3 00
	$6 76
STEAM ENGINEERING.	
Quarterman machinist	$3 76
Total daily pay proposed	$22 52

The aggregate daily pay of foremen at all the yards is, at present, $900.85, including those at Pensacola; if the navy-yards at Portsmouth, Boston, Pensacola, and League Island be closed, and the organization of the other yards reduced as proposed, it will be $523.39, an annual reduction of expenses of $116,238; with the Portsmouth, Pensacola, and League Island yards closed, $582.65; and with the Boston, Pensacola, and League Island yards closed, $580.64.

U. S. FLAGSHIP NEW HAMPSHIRE,
Newport, R. I., October 11, 1883.

SIR: Your letter of March 7, "authorizing and directing" the Commissioners on the sale of the navy-yards to report on certain matters in connection with each yard, has been duly received and carefully considered.

The first inquiry is in relation to each navy-yard, "the sale of which is not recommended," whether it is in our "opinion 'specially' adapted for any specific purpose and whether it should be retained in active operation, or otherwise used?"

It is believed that this question is practically covered by the memorandum submitted to you under date of June 6 last.

In answer to the additional inquiries on this point, contained in your letter of September 26, we recommend that the construction of boats and blocks be confined to the New York navy-yard, and that the engines and boilers of steam launches, engine and boiler mountings, gun-carriages and fittings, anchors, chains, sheet copper, &c., be made exclusively in the manufacturing arsenal at Washington.

These recommendations, however, are not to affect the navy-yard at Mare Island, which should be made complete in every particular, being the only yard on the Pacific coast.

The object of these recommendations, as well as those contained in the memorandum, is to close permanently all duplicate shops, and to consolidate others whenever they have not enough work to justify their being retained in active operation; but not to keep them closed when the amount of work to be performed justifies their reopening, or to disturb the established order which prescribes the duties of the several Bureaus of the Navy Department.

The second inquiry in regard to each yard is,

Whether it is fully equipped and provided with all necessary appliances for the prompt economical execution of such work as may be required, and if not, in what respect it is defective, and what will be required to place it in proper and effective condition for any probable demands in time of war, and the estimated cost of any additional requirements.

When it is considered that the days of wooden ships of war, for the building of which our yards were specially adapted, have passed almost entirely away, it will be readily understood that there are many things to be done, and tools and machinery to be procured, to place them in condition for building and repairing iron and steel ships; while our docking facilities are notoriously inadequate to the wants of the Navy, even in peace, the necessity for increasing them having been ably and frequently set forth.

But the plans and estimates for such works and for the changes necessary to prepare the yards for iron ship building, or even for repairing them, require careful study and much time, and is therefore a labor which this Commission, is not, with its present duties, able to undertake. But we are fully impressed with the necessity of making the following improvements, viz:

The water front of the Boston yard to be reconstructed and deepened, a wet basin, already half excavated, and additional dry-docks constructed. The Wallabout Channel, at the New York yard, to be closed and converted into a wet basin. The cob-dock to be reconstructed, and enlarged to the greatest extent possible, and utilized for dry-docks; and the navy-yard itself extended to Hudson avenue, in order to secure a proper boundary and the exclusive control of the entrance of the

Wallabout. The navy-yard at Norfolk to be extended to the south by the purchase of the land recently examined and favorably reported on by a special Board, and a wet basin and additional dry-docks constructed; and the further development of the manufacturing arsenal at Washington at an early day.

We therefore recommend that for the proper execution of these suggestions that full plans and estimates for each of the above-mentioned yards be prepared, under the immediate supervision of the Chief of the Bureau of Yards and Docks, and that such plans be submitted to the chiefs of all the Bureaus of the Navy Department, assembled as a board, for their approval before they are finally approved by the Secretary of the Navy. That after the final approval of said plans, no deviation therefrom be permitted, except upon the recommendation of said board and the written order of the Secretary of the Navy; and until such plans have been completed no money be spent on any of the yards for improvements.

We beg leave to renew here the recommendations in regard to League Island contained in the memorandum submitted last June.

A site for a navy-yard was selected on the Delaware, that the Government might have a "proper establishment for the construction of iron vessels, iron armor, and iron work of every description for naval purposes, in the immediate vicinity of the iron and coal region of the more central part of the Union." To carry out these views we recommend that a special board be appointed, at as early a day as practicable, to determine the exact requirements of such a yard, and that plans be prepared under the immediate supervision of the Chief of the Bureau of Yards and Docks, in accordance therewith, and that no further money be expended on League Island until the completion and approval of such plans. We also recommend that after the plans have been fully matured, sufficient appropriations should be obtained to complete this yard at the earliest practicable moment, that the Government may avail itself as soon as possible of the undoubted advantages possessed by this site.

The third query invites an expression of our views as to whether "any improvements can be made in the system of performing work at the navy-yards which will promote efficiency and reduce expenses."

In the memorandum already referred to, an attempt was made in the direction implied by this inquiry. The scheme for the reorganization of the working force of our navy-yards, as contained in that paper, was the best that could be devised under the circumstances; it was a step towards a concentration of forces and economy and dispatch in the method of doing work. It was submitted in the belief that a fair trial would soon develop whatever was impracticable and lead to proper amendment; and that in a short time the new system would adjust itself so as to run smoothly, as it certainly would economically.

To a proper understanding of the subject, it should be stated, that the present wasteful extravagance in employing so great an excess of non-producers, and the inefficient system of doing business which has for years past been steadily increasing in our navy-yards, is but the natural outgrowth of the constitution of the Navy Department itself. There can be no manner of doubt of this. Each navy-yard is made up of a number of separate and comparatively independent establishments, little principalities, as it were, each owing allegiance to its own sovereign, the chief of the Bureau to which it belongs. The heads of departments of a navy-yard have extensive and responsible duties, and a large patronage, and are naturally jealous of the interference of any one but their own chiefs.

Thus each department has been gradually building itself up, so as to be independent of all other departments, and is constantly striving to do all its own work. Each of the principal departments has its own body of artisans, its own machinery, its own steam generators, and its own peculiar method of doing business. As an illustration, we take from official "schedule of wages" (Form 9) of civil engineer's office the following ratings: *Boiler-makers, boiler-makers' helper, calkers, coopers, cabinet-makers, core-makers, ship-joiners, ship-carpenters, machinists, machinists' helpers, molders, oakum-pickers, and pattern-makers*—a little ship-yard in itself.

In this way it has come that some of our yards are filled up with machinery far beyond their actual needs, and it is no exaggeration to say that there is to-day enough machinery of various kinds in either the New York or Boston yard to do the work of its own particular class of the entire Navy during peace. We habitually speak of a private ship-yard as a "plant"; but each of our national ship-yards is a segregation of "plants," each having its own separate organization, and each its own internal regulations. Many illustrations might be given to show how, through the want of concert of action among these several "plants," useless and vexatious delays occur, to say nothing of the waste of time and of public money due to such diffusion.

To make such radical changes as we proposed in our memorandum was no easy task, nor did we expect that they could be effected without considerable friction, not to say opposition; but supposing the changes to be made on the basis laid down by the Commission, it is hardly to be hoped, that under present conditions they will be permanent. For whatever changes may be introduced now, and how beneficial soever they may be, still the same causes remaining in active operation must inevitably produce the same results, and in time restore the system of independent plants, with all its attendant evils. Hence we conclude that to organize our navy-yards on a just and permanent basis, to consolidate their several plants, to introduce thrift in the management and promptness in the methods of doing work, with a proper system of accountability; to secure, in short, in each of our yards unification, method, economy, and dispatch, with an administration of its affairs agreeable to the principles of business as understood in civil life, it is absolutely necessary to begin within the Navy Department itself.

Upon the consummation of so desirable an event, which need not necessarily change the general character of the present organization of the Department, the scheme for consolidation, the proper classification of duties, and the abolition of all unnecessary employés in the navy-yards can be carried into effect without difficulty and with the essential element of permanency insured.

All of which is respectfully submitted by your obedient servants,

S. B. LUCE,
Commodore, United States Navy, President of Commission.
CHAS. H. LORING,
Chief Engineer, United States Navy, Member.
A. B. MULLETT,
Member.

Hon. WM. E. CHANDLER,
Secretary of the Navy, Washington, D. C.

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REPORT OF THE CHIEF OF THE BUREAU OF YARDS AND DOCKS.

BUREAU OF YARDS AND DOCKS,
NAVY DEPARTMENT,
Washington, D. C., October 26, 1883.

SIR: In compliance with your order of the 13th instant, I have the honor to submit herewith my annual report for the fiscal year ending June 30, 1883, and estimates for the fiscal year ending June 30, 1885, together with an abstract of offers for supplies coming under the cognizance of the Bureau of Yards and Docks for the fiscal year ending 30th June, 1883.

I am, with great respect, your obedient servant,

ED. T. NICHOLS,
Chief of Bureau.

HON. WM. E. CHANDLER,
Secretary of the Navy, Washington, D. C.

BUREAU OF YARDS AND DOCKS,
NAVY DEPARTMENT,
Washington, D. C., October 26, 1883.

SIR: The following report of the operations of this Bureau, for the fiscal year ending June 30, 1883, and estimates for the fiscal year ending June 30, 1885, is respectfully submitted.

NAVY-YARD, PORTSMOUTH, N. H.

The total expenditure at this yard for labor and material under the two heads of appropriation, viz, "general maintenance" and "repair and preservation," has been $51,338.09. This amount has been expended in the ordinary, every-day, constant care of the vast amount of public property contained within its limits, and I have every reason to believe, has been as judiciously expended as possible.

The water system at this yard is very deficient. It is mainly dependent upon two small ponds on Seavey's Island, which, in turn, are mainly dependent upon rains.

In consequence of the limited amounts available for the work of the yard proper, it has been impossible to give requisite care and attention to these ponds, and they are now so filled with the washings of the surrounding hills, grass, weeds, &c., that their depth is seriously impaired and their superficial area enlarged, thus increasing the loss by evaporation.

The steam generators supplying power for all mechanical purposes in the yard, are supplied with water from these ponds. This supply is now only adequate to meet the demands in ordinary times, and should an emergency arise requiring the full force of the machinery of the yard, we would find ourselves very much embarrassed for water. It is proposed to clean out and enlarge the capacity of these ponds. and an appropriation is asked for this purpose.

NAVY-YARD, BOSTON, MASS.

The total expenditure at this yard for the fiscal year ending June 30, 1883, has been $76,679.98, and has been as carefully administered as

possible. Under the limited amount available for repairs, it has been impossible to prevent deterioration, and there is scarcely a building or public work of any character in the yard that is not sadly in need of attention.

The enforced economy (?) of the past few years is rapidly accumulating a heavy bill of expenses, if the yards are to be maintained, and rapidly deteriorating the value of the property if to be disposed of.

In addition to the ordinary estimates for current expenses, estimates are also presented for works of improvement, considered necessary to the efficiency of the yard, and, indeed, under the heads of "general maintenance" and "repairs and preservation," there is ample field for the employment of much more than has heretofore been allotted (for the past few years) from the small appropriations under those heads to that yard. The works of improvement as estimated for are considered necessary, if this yard is to be retained.

NEW LONDON NAVAL STATION.

The expenditures at this place have been comparatively small and almost entirely in the direction of "maintenance." Those for repairs have been no more than were absolutely necessary for the care of the property. For naval purposes it is absolutely necessary that the water front of this valuable property should be protected by a quay wall, and I respectfully renew my recommendation of the past two years for an appropriation for this purpose. It is understood that the New York and New England Railroad Company, having made a survey through this property, have applied for a grant of the right of way therefor. If this right of way is conceded, it will, in my opinion, be fatal to its usefulness for naval purposes. The property is a comparatively narrow strip of land bordering on the river, and a railroad traversing this strip from end to end would effectually destroy all chances for building dry-docks, railways, building ships or wet-basins, besides being a source of danger to the employés of the yard.

This land was ceded to the General Government by the State of Connecticut for naval purposes, and it is believed that even Congress cannot divert it to any other use without alienating the gift. If it is not to be developed, I would recommend, in the interest of economy, that all the movable property be transferred to other yards, or sold, the administration broken up, and the fixed property left in care of one person, who will reside upon it.

NAVAL STATION, SACKETT'S HARBOR.

One man has been employed as shipkeeper and watchman during the year, at a total cost of $702.86. After the old ship New Orleans is sold and removed there will be no necessity for his retention. One of the two houses on the property is in fair condition, and it is believed that the privilege of occupying this house would be ample compensation for the care of the property.

NAVY-YARD, NEW YORK.

The appropriation for the fiscal year ending June 30, 1883, contained an item of $150,000 for "dredging caisson and intercepting sewer." Under the first item work was carried on to the extent of removing upwards of 100,000 cubic yards of material, at a cost of $28,289.24. It

was originally contemplated to use a portion of this appropriation in constructing a new caisson gate for the dry dock, but in view of the prospectively large amount that would be required for the contemplated sewer, it was deemed advisable to thoroughly repair the old caisson, which has been done at a cost of $20,804.65, and it is now in condition to last many years with care. Work upon the intercepting sewer, designed to divert to the East River the sewerage emptied into the Wallabout channel, near the entrance of the dry dock, was commenced by Mr. Charles Hart, of Brooklyn, January 3, 1883, to whom the contract was awarded after the failure to qualify by lower bidders.

This work has been prosecuted under many difficulties, mainly the inclemency of the winter weather, and the necessity of modifying from time to time the original plans and specifications as the nature of the soil demonstrated. At the end of the fiscal year this work had made very satisfactory progress, and at the present time is virtually completed, and the sewerage will soon be diverted to the East River, and the sum appropriated for dredging in the present fiscal year will be available.

The buildings and other public property in this yard have been as well cared for as the very limited and inadequate appropriations would admit of. With so many objects needing attention, the Bureau and the authorities of the yard have been much perplexed as to the best disposition to be made of the funds at their disposal. Repairs to a greater or less extent have been made upon forty buildings, besides various other objects, as wharves, sewers, roads, fences, walls, gutters, drains, water and gas service, sheers, cranes, dry-dock, &c., in many instances mere patchwork or makeshifts, where the best interests of the Government required renewal. The system is resulting, and must continue to result, in the rapid deterioration of the public property, rendering necessary at no very distant day a heavy outlay to restore the yard to a condition of usefulness.

In addition to the estimates for general maintenance and repairs and preservation, I respectfully renew my recommendation of last year, viz: For "yards and docks building," "boiler shop, wing to new machine shop" (a very important object in view of the prospective liberality of Congress in creating a new Navy), "shipwright's shed," "paint shop," an additional appropriation for dredging and for new caisson for dry-dock. The swinging gates of the dry-dock are gone beyond repair. I would not assume the responsibility of using them. A new pair, or an additional caisson, are absolutely necessary.

NAVY-YARD, LEAGUE ISLAND, PA.

The expenditures at this yard have been mainly in the direction of care and preservation of the dikes and such minor repairs upon buildings, roads, bridges, &c., as were possible with the limited funds.

On the supposition that League Island is to be retained as a navy-yard, the estimates of last year are respectfully renewed.

NAVY-YARD, WASHINGTON, D. C.

The dredging of the channel from the Potomac River to the navy-yard has been the only work of improvement of any importance during the year. Notwithstanding the delay in building the dumping-scows and putting the dredger in good working condition, the work of dredging was commenced on October 20, 1882, and has been continued, with many

interruptions from breakages of machinery, encountering of wrecks, &c., up to the present time. The total excavation to July 1, 1883, has been 74,457 cubic yards, of which 63,602 cubic yards have been in the main channel. A channel 65 feet wide at the bottom, with a depth of 18 feet at low water, has been secured through the bar extending from the old channel to Buzzard's Point. In January, 1883, a board of officers was appointed by the honorable Secretary of the Navy to examine and report upon a plan of Civil Engineer A. G. Menocal, U. S. N., for the permanent improvement of the Eastern Branch. This Board, in its report (a printed copy of which accompanies this), very strongly approved this plan. It is proposed to ask for an appropriation of $25,000 for the continuation of dredging, unless it shall be decided to adopt the plan recommended by the Board, in which case the sum of $60,000, plus any unexpended balance from present appropriation, will be required.

Plans and estimates for a building suitable for an ordnance machine-shop have been submitted heretofore, and are again submitted. In consequence of the weak and dangerous condition of the present building from settling, and consequent bulging and cracking of the walls, it became necessary to reduce the weight resting on them by the entire removal of the upper story, with its accumulation of stores, machinery, &c., thus very materially reducing the space necessary for carrying on the operations of the Department.

For several years past there has been embodied in the annual report a recommendation for the purchase of squares 853 and 826, adjoining the navy-yard property on the west. The gradual filling in of the marsh on this side affords easy access to the navy-yard, the only protection being a wooden fence extending across the dry ground to the swamp. This border of the yard should be protected by a substantial brick wall, but as this wall would pass directly through the marsh, it must necessarily have a pile foundation, adding considerably to the expense. As this navy-yard will probably be no more than a manufacturing establishment in the future, I am of opinion that it now contains all the land it requires.

NAVY-YARD, NORFOLK, VA.

An appropriation of $5,000 was made for the construction of two cisterns of this yard. These cisterns were completed within the fiscal year, are now in use, and supplying a long-felt want. No other improvements have been made, and the other expenditures have been kept within the smallest possible limits, the reduced appropriations rendering it impossible to even properly care for the public property.

In view of the possible abandonment of one or more of the other navy-yards, the importance of this one cannot be overestimated; and to make its usefulness approximate to its importance, it would seem necessary to increase its area, but if this is not deemed advisable, many improvements are necessary within its present area, among which, and perhaps most important, is the extension of the quay wall. The extension of the present dry dock is also an important measure, as will be seen by the following figures: Extreme lenghth of dock, 341 feet; extreme length of new cruiser Chicago, 342 feet; extreme length of Tennessee, 375 feet, neither of which vessels can by any possible means be placed in the dock. In this connection it is recommended that in case of extension of this dock, provision should be made for new pumps, engine-house, &c.

A marine railway is a necessary adjunct to this yard, and in case of the extension of the dry-dock as recommended will be of the greatest importance.

The extension of the railroad system of the yard is of great importance. Coal house No. 54 is also needed.

The above items are selected from those embraced in the annual estimates of the civil engineer of the yard as of the most importance under the head of improvements, though a design to place this yard on a first-class basis would necessarily include all of them.

PENSACOLA NAVY-YARD.

An appropriation of $150,000 for the improvement of this yard was made available July 1, 1880, and to July 1, 1883, there had been expended of this appropriation the sum of $149,007.71, leaving a balance of $992.24 to lapse into the surplus fund of the Treasury. July 1, 1881, another appropriation of $75,000 became available to continue the improvement of the yard, of which there remained on hand July 1, 1883, a balance of $15,141.36. Out of the balance of the first appropriation there was expended during the last fiscal year $6,000 in the care and preservation of the first two sections of the iron floating-dock sent to the yard some years since, and out of the last-named appropriation of $75,000 the necessary expenses attending the care, preservation, towage, wharfage, &c., of the two remaining sections were paid, as also payment for various works of improvement in the yard, including a caisson for dry-dock, costing $21,034.63, leaving a balance as above stated.

This yard having been declared closed by order of the honorable Secretary of the Navy, under authority of the act of Congress of March 3, 1883, it was deemed advisable to permit this balance to remain in the Treasury unexpended.

During the preceding fiscal year the yard was virtually closed in consequence of the prevalence of yellow fever in and about Pensacola.

There are now at this yard four sections of an iron floating-dock, the construction of which was authorized by acts of Congress approved June 23, 1874, and March 3, 1875. Two of these sections are hauled up on the beach for their better preservation, and the other two are moored in the basin. The machinery, material pertaining to the superstructure, &c., is all stored as carefully as possible in the yard, and its care and preservation is a constant source of anxiety and expense to the Bureau.

To make these four sections available for use, it is estimated, will require about $70,000, and even then their usefulness will be limited on account of their limited capacity. To make this dock what it ought to be, two additional sections will be necessary, and if it should be decided to build these two additional sections, it is believed that the necessary material can be transported and the sections built at the yard at a less cost than to build them at the North and tow them there.

The future of this yard depends so much upon the final report of the Commission on Navy-Yards, and the action to be taken thereon, that I do not feel justified in making any recommendation.

KEY WEST NAVAL STATION.

The importance of this station is in its convenience to the vessels of the so-called Home Squadron, as a basis of supplies of coal, &c., and its facilities for making minor repairs to machinery. It has a fine storehouse, coal-shed, and moderately efficient machine-shop, and the prop-

erty is in very fair condition. The water front has an entire length of 850 feet, intercepted, however, by two streets, and by a lot known as the Mallory lot. The purchase of this Mallory lot and the closing of the intercepting streets would add very materially to the value of the Government property, giving it the entire water front. I consider it detrimental to the interests of the Government to have private interests thus interjected into its domain.

The bulkhead along our present water front, originally of mangrove piles, is in a sadly dilapidated condition from the destructive operations of the worm and the sea, and should be immediately renewed, for the preservation of the property. It is proposed to erect a permanent concrete and rock wall along this entire front, and the purchase of the lot and closing of the intercepting streets is not only desirable but important. Estimates for both of these objects are presented.

On June 16, 1880, an appropriation of $30,000 was made for the repair and renewal of the old wharf at this station. After due and careful inquiry, it was deemed best to replace the old structure with an entirely new iron wharf. Accordingly a contract was made with A. P. Boller & Co., of New York, after public advertisement, for all material and labor required, and work commenced July 1, 1882.

On the 8th July, 1882, in consequence of representations made by the commandant of the station and the superintending engineer, as to the inefficiency and insufficiency of the plant and working force, I ordered operations stopped. The contractor was called upon to comply with the terms of the contract in these respects, but instead of doing so, withdrew his men and plant to New York on or about July 22, 1882. The season was then too far advanced to procure the necessary plant and resume the work, but the time was utilized in collecting from the various navy-yards the necessary appliances and shipping them to Key West, so that on the 4th of January, 1883, work was resumed under the immediate orders of Lieut. Commander J. K. Winn, U. S. N., the commandant of the station, and Civil Engineer R. E. Peary, U. S. N., as superintendent, and prosecuted with great vigor and under very adverse conditions to a successful termination.

The wharf was practically completed at the end of the fiscal year, within the limit of the special appropriation made for the object, and I have every reason to believe is a substantial permanent structure, and I beg here to record my appreciation of the zeal, skill, energy, and ingenuity displayed by the above-named gentlemen in its construction.

MARE ISLAND NAVY-YARD, CALIFORNIA.

The works at this yard for which special appropriations were made were for completion of iron-plating shop; continuation of stone dry-dock, and enlargement of reservoir. Nothing has been done under the first of the above items in consequence of the building being largely occupied for the storage of valuable timber, for which there is no other available place at present. Under the second head valuable progress has been made and good value received for the money expended.

The work of constructing this dry-dock has been energetically carried on in the face of many obstacles, under trying circumstances, involving great anxiety to and demanding constant vigilance on the part of the civil engineer, Mr. C. C. Wolcott, U. S. N., who, I am pleased to say, has in all cases been found equal to the emergency. The great cause of anxiety has been the condition of the coffer-dam, a structure of perishable material, built upwards of nine years ago, showing very marked

signs of its age and decay, demanding constant and careful attention, attended with great expense.

The year's progress on the dock would have made a better showing but for the unfortunate controversy about the awarding of the contract for the granite. Of the quality of the granite furnished, the civil engineer, in his annual report, thus speaks: "The granite is of most excellent quality and of great beauty, though hard to work; in its finished state it cannot be excelled." Although the contract was not awarded until 7th December, 1882, there had been accepted and dressed at the close of the fiscal year 11,216 cubic feet of this granite, much of which is in place in the structure.

Within the present year it is hoped to get the caisson and pumps in place, when the dock will be available for use, though not entirely completed. It is proposed to ask for an appropriation of at least $500,000 for the coming fiscal year.

In this connection, I beg to call your attention to the remarks of Civil Engineer Wolcott in his annual report upon this work:

> The dock is now so near completion and ready for use that it would seem to urge the appropriation of a sum sufficiently large to complete it, and the true economy of construction consists in having available immediately the money to meet all obligations for necessary material, and the constant employment of labor to properly work it. With these conditions filled, the dock can be completed in less than two years, and its use can be anticipated in a much shorter period. The facing of granite can go on while the dock is being used without inconvenience, and I especially urge the appropriation of not less than $500,000 with which to continue it. The total amount required to complete the dock will be about $650,000, barring accidents. The great cost is largely due to the use of granite as a facing, and which on this coast is double the price paid for it in the East. The amount appropriated will be expended in the removal of the coffer-dam, the filling, grading, and paving about the dock, and the purchase, dressing, and laying the granite facing of the dock.

In all of which I most cordially concur; and just here it may not be out of place to express the opinion that the recommendations of the gentleman who has shown himself so thoroughly practical and efficient in the conduct of this work since it has been in his charge, and who has prosecuted it with so much energy and skill, are entitled to great consideration.

Under the third head of appropriation for the fiscal yearn eding the 30th June, 1883, viz, "reservoir," the entire amount has been expended in increasing the capacity of the reservoir to 27,000,000 gallons by excavation. Bids were invited for the work, the lowest received being fifty cents per cubic yard, and time to complete ninety days. This work was performed by the department of yards and docks at a cost of thirty-four cents per cubic yard, and completed in fifty-four working days.

The two past rainy seasons of California have proved remarkable exceptions to the general rule, and the total collection in our reservoir has not amounted to much more than 2,000,000 gallons. I am satisfied that when this reservoir is filled it will become an invaluable adjunct to the usefulness of the navy-yard, and a most important element of safety. We have a contract with the Vallejo City water-works for an annual supply of 12,000,000 gallons of water. The same causes which have operated against the filling of our reservoir, viz, the absence of rain, have operated against this company to such an extent that it has been compelled to reduce its supply to the navy-yard one-half, and, indeed, since the close of the last fiscal year the navy-yard supply from this source has frequently ceased entirely.

The cistern capacity of the yard is entirely inadequate; mechanical industries are seriously interfered with, and much valuable property is

exposed to danger, if not destruction by fire, in consequence of lack of water.

Upon becoming acquainted with this condition of affairs, I, at the earnest suggestion of the civil engineer, indorsed by the commandant, authorized the experiment of sinking an artesian well. After careful examination by Mr. Wolcott, the civil engineer, a spot considered favorable was selected, but before work was begun an expert in artesian-well boring was invited to make an examination, and gives his opinion as to the most favorable place to begin operations. Without any knowledge of what had been done by the civil engineer, this expert reported upon a position in close proximity to that selected by Mr. Wolcott. With this confirmation of Mr. Wolcott's judgment by a disinterested party, I no longer hesitated, but authorized the work to proceed. At the close of the fiscal year a depth of 330 feet had been reached, but without reaching water. This work has not been pushed with the energy its importance deserved, simply for the reason that the necessary funds could not be spared from current appropriations.

The water famine for the past two years in California has awakened attention to the necessity of seeking more assured sources of water supply than the uncertain one of catchment and storage. I am so deeply impressed with the importance, if not absolute necessity of this, that I do not hesitate to recommend and urge an appropriation of $10,000 for this purpose. The success attending the efforts at the Benicia Arsenal, where water was obtained at depths of 900 and 1,500 feet, is of sufficient encouragement to warrant the asking of this appropriation. The expensive tools. &c., used in this work, are believed to be still on hand, and can no doubt be borrowed, and their use will, in all probability, assure an abundant supply of this so much needed element and save the Government the annual water-tax of from $5,000 to $7,000 per year, which it is at present paying.

The roads, walks, gutters, and drains in this yard are sadly in need of attention. The plank roadways laid in 1874 must be renewed or replaced by paving or macadamizing. In the winter, or rainy season, the roads are at times almost impassable for vehicles of any kind, in consequence of the deep mud; transportation is vastly increased in difficulty, and the wear and tear upon stock is ruinous. The defective plans and construction of the sewers render a modification thereof essential. An estimate of $20,000 is presented for the above objects.

The necessity of a wharf along a portion of the water-front, a distance of about 450 feet, is apparent, and is specially commended as not only of great value to the efficiency of the yard, but also as a means of preserving the deep water and a saving of expense of dredging.

During the fiscal year a mud-bank in front of the coal wharf was effectually removed by a simple process of stirring it up on the ebb tide, so that a vessel drawing 16 feet was enabled to reach the coal wharf, an event that has not occurred before for years. The effect of this wharf, as recommended, with its row of sheet-piling, will straighten the water-front, direct the current in a straight course, and thus obviate the danger of other formations of the same kind.

The wharf adjoining the ferry-slip, the slip itself, the ferry-house, watch, guard, and freight house demand immediate attention to the extent of rebuilding.

Referring again to the subject of water, I deem it only proper to call attention to the need of more cisterns in the yard. The line of officers' quarters is 450 yards from the water-front, and depends for its protection from fire on a 3-inch water-main, which has a pressure of not more than

10 pounds when the forcing-pump is not in use. The office building, in which the valuable records of the yard are kept, is also 400 yards from water. The danger from fire at this yard is greatly increased over that of other yards, owing to the long-continued dry season, when all the grass, the wood-work of buildings, &c., are throughly dried out, and as inflammable as tinder. A fire once started during the absence of the workmen would probably result disastrously. It is recommended that at least seven cisterns should be constructed, and for this purpose an estimate of $46,000 is presented.

The Mare Island navy-yard being the only one on the Pacific coast, the base of supplies and repairs for the Pacific and China squadrons, its importance cannot be overestimated, and it would seem to be the part of wisdom to place it in first-class condition, ready to do all work it may be called upon for at short notice.

NAVAL ASYLUM, PHILADELPHIA, PA.

There were on the rolls of the asylum July 1, 1882, the names of 194 beneficiaries; 22 were admitted during the year, 18 have died, 7 have been dropped for absence without leave, 1 discharged at his own request, and 1 dismissed for misconduct, leaving 189 on the rolls at the end of the year. This shows a decrease of 5 as compared with the previous year, and is the first instance of a decrease in many years. It is safe to say, however, that the applications for admission are in excess of the vacancies. The term of service entitling to admission is twenty years, but in exceptional cases this rule has been waived. Now, however, the building is so nearly filled to its utmost capacity, I am reluctantly compelled to refuse many worthy and deserving applicants, of less than the prescribed length of service, that there may be room for applicants of full term. The building is now uncomfortably full, many rooms being used as sleeping-rooms, out of necessity, that were never designed for that purpose, being deficient in light and ventilation. I have, on previous occasions, recommended the removal of the asylum to a more suitable location, and I respectfully again call attention to the subject. The thickly settled portion of a large city is plainly no place for an institution of this kind. There is nothing in the surroundings to remind the old men of their former life, or anything in which they take any interest. The institution should be located on or near the sea shore, not so remote from the life and activity of a city, that the old men may not visit it easily, and in sight of passing vessels, so that they may be reminded of occupations and excitements of their former lives. As the selection of a proper site and erection of suitable buildings will necessarily involve some time, it is not considered inconsistent to renew former recommendations for the construction of an addition to the present asylum building. This addition is a necessity. The present building is lacking in many essentials of an institution of its kind, particularly in the matter of bathing facilities. The kitchen and laundry should be located in this new building, and quarters provided in it for the servants. This will give additional rooms in the main building for beneficiaries, admit of the enlargement of the dining-room, now very necessary, and afford ample space for bath-rooms. The removal of the kitchen and laundry will tend very much to improve the atmosphere of the house; the odors from cooking and washing are scarcely ever absent from it.

The governor of the asylum, in his annual report, uses the following language:

> I beg earnestly to recommend the employment of three additional waiters. There are at present but five. Some of the men are blind, and others suffer from various infirmities, requiring at table special attention. Each waiter has now to attend to about thirty-five beneficiaries, a proportion entirely too great for proper service.

I entirely concur in his views; and as this institution is supported from the pension fund, a fund which many of these old men helped to create, it is only right and proper that they should receive all the benefit from it that it is capable of bestowing.

The estimates provide for an increase of pay in the cases of some of the employés, viz, the steward, chief and assistant cooks, master-at-arms, corporal, and matron. The duties of these persons are of the highest importance to the institution, and to the welfare and comfort of the beneficiaries. Persons in all respects suitable and qualified for these positions cannot be obtained for the prices at present paid, and the increase is earnestly recommended. An estimate is also submitted for $600 for music in chapel. This will pay for the services of organist and singers during the usual Sunday exercises, and allow of an occasional entertainment of some kind. It has been observed that when voluntary entertainments have been given here by kindly-disposed persons from the city, the beneficiaries have attended and manifested great interest and enjoyment. The small amount of pocket-money they receive does not allow them either to contribute anything for such entertainments or go to the city for them. This small amount of $600, disbursed under the direction of the governor, can be made the medium of much innocent pleasure to the old men, who have so little to break in upon the dull monotony of their lives. There is no fund at present from which such entertainments can be paid for, and I trust that the appropriation may be made.

For many years the gratuity given to the beneficiaries has remained the same, viz, $1 per month. This is a small sum at any time, but now that the purchasing power of money has so greatly decreased it is of course proportionately less. It is recommended that this gratuity be increased to $2 per month, and an estimate is accordingly made therefor.

During the past fiscal year the aggregate number of rations served at the asylum table was 2,000 less than the previous year; the cost was $1,900 more. The explanation of this apparent paradox is to be found in the increased cost of provisions. The estimates for the coming fiscal year are based somewhat upon the rise in prices, and also to meet the contingency of any unusual increase in the number of inmates. Contracts are made at the beginning of the year for all articles of supplies, but these contracts are as to price only, the quantities varying with the number of inmates; any balance left from the appropriation at the end of the year reverts to the Treasury.

IN GENERAL.

The estimates for "general maintenance," "repairs and preservation," "civil list," and "contingent," are very nearly the same as those presented last year. Experience has proved that the sums appropriated for the fiscal year just closed, under the first two heads, were inadequate to meet the demands falling upon them, and Congress was called upon, and responded by making an additional appropriation under the head of "maintenance," $64,000, which barely carried the Bureau through the year, on a scale of expenditures which certainly was not advantageous

to the interests of the Government, in that it did not admit of many things being done which properly pertain to this Bureau alone, and only admitted of tinkering where thorough repairs were necessary. Under the head of "maintenance" the reduced appropriations necessarily involve a large reduction of the watch-force, fire department, and consumption of gas, thereby exposing the valuable property within the navy-yards to greater danger by theft and fire. It is doubtful if the saving made by the reduced appropriations will, in the end, compensate for the losses that will occur from the above causes.

Under the head of "repairs and preservation," I have no hesitation in saying that the reduction of appropriations is not an economical measure. For the past two or three years this appropriation has not been sufficient to properly care for and keep in repair the property to which it properly pertains; consequently, deterioration is constantly progressing, until eventually rebuilding instead of repairing will be in order.

The so-called closing of certain navy-yards does not help the matter much, for while the yards are closed to work the valuable buildings and machinery are still there, requiring to be cared for and kept in repair, or else suffered to go to decay, so that when again occupied everything is sadly out of repair, requiring large expenditures to again put in working condition, or in case of selling the property will be in such bad condition as not to bring one-half its value.

The following estimates for the fiscal year ending June 30, 1885, are respectfully submitted:

NAVY-YARD, PORTSMOUTH, N. H.

For water-works	$25,000 00

NAVY-YARD, BOSTON, MASS.

For water-pipes	25,000 00
For cart-shed	10,000 00
For paving and grading	20,000 00
For floating gate for dry-dock	30,000 00
For rebuilding wharves	50,000 00
Total	135,000 00

NAVY-YARD, BROOKLYN, N. Y.

For building for yards and docks for general storage	85,000 00
For boiler-shop (wing to machine-shop)	136,000 00
For shipwrights' shed	10,000 00
For paint-shop	20,000 00
For dredging	50,000 00
For caisson for dry-dock	30,000 00
Total	331,000 00

NAVY-YARD, LEAGUE ISLAND, PA.

For landing wharf, foot Fifteenth street (75 by 400 feet)	26,000 00
For dredging and filling in	100,000 00
Total	126,000 00

NAVY-YARD, WASHINGTON, D. C.

For new ordnance machine-shop	95,000 00
For extension of yard wall	21,000 00
For dredging, continuation of	25,000 00
Total	141,000 00

NAVY-YARD, NORFOLK, VA.

For centrifugal cataract pumps, including engine-house, pump-well, culvert, and boiler	$45,000 00
For extension of quay wall	200,000 00
For dry-dock extension	200,000 00
For railroad extension and engine-house	20,000 00
For coal-house No. 54	60,000 00
For marine railway	100,000 00
Total	625,000 00

NAVY-YARD, MARE ISLAND, CALIFORNIA.

For continuation of dry-dock	500,000 00
For extension of timber-shed	11,000 00
For cisterns	40,000 00
For wharves, bridges, landings, and boats	75,000 00
For roads, walks, gutters, and drains	20,000 00
For artesian well	10,000 00
Total	656,000 00

NAVAL STATION, NEW LONDON, CONN.

For quay wall	150,000 00

NAVAL STATION, KEY WEST, FLA.

For bulkhead at water-front	4,500 00
For purchase of Mallory lot	15,000 00
Total	19,500 00

RECAPITULATION OF ESTIMATES.

Sheet No. 1.	For support of Bureau of Yards and Docks	13,360 00
No. 2.	For general maintenance and contingent	440,000 00
No. 3.	For support of Naval Asylum	92,251 00
No. 4.	For repairs and preservation	400,000 00
No. 5.	For improvements at navy-yards	2,208,500 00
No. 6.	For civil establishment	45,929 75
Total		3,200,040 75

Accompanying this report is an abstract of offers for supplies received for furnishing articles coming under the cognizance of the Bureau of Yards and Docks, made in conformity to act of Congress approved March 3, 1843.

I am, very respectfully, your obedient servant,

ED. T. NICHOLS,
Chief of Bureau.

Hon. WM. E. CHANDLER,
Secretary of the Navy, Washington, D. C.

UNITED STATES NAVY-YARD,
Washington, D. C., February 2, 1883.

SIR: In compliance with instructions contained in your order of the 17th ultimo, a copy of which is hereunto appended, marked A, and of the order of January 27 to Civil Engineers White and McCollom, marked B and C, we have carefully considered the plan submitted by Civil Engineer A. G. Menocal, U. S. N., for the enlargement and maintenance of the channel leading to the navy-yard, Washington, and have the honor to submit the following report.

The Board does not consider it necessary to enter into any argument to show the necessity of the adoption of some plan to improve and

maintain the channel in order to insure the efficiency of the navy-yard. It is believed that this necessity is patent to all. In addition to the testimony of officers who, in years past have navigated this channel, which bears simply upon the general changes which have taken place in the regimen thereof, attention is called to sheet No. 11 of drawings attached to and forming a part of this report. This sheet shows the comparative cross-sections of the channel taken at five different points in 1828, 1842, and 1882. An examination of these different cross-sections will show the rapidity of the silting up of the channel, and, judging from the great changes which have taken place in the last forty years, the time is not far distant when the channel, as such, will become totally obliterated. In addition to the deposits shown to have taken place in the last forty years, much material was removed by dredging between the years 1850 and 1869, during which period the dredge was used extensively, the amount so moved being probably fully equal to one-half what is now found in the channel, as compared with the channel as it existed in 1842.

The enlargement of this channel by dredging would be a most expensive operation, and in order to maintain it after completion would require large annual outlay. The plans, as submitted by Mr. Menocal, will cause the forces of nature, which now operate to the detriment of the channel, to change their action and tend to the enlargement and improvement thereof. From the nature of the material composing the bottom of the river, no reasonable doubt obtains as to the immediate result which will follow the construction of this work of improvement.

When the works are first introduced the velocity of the current during the ebb of the tide through the dikes will be on the surface about 4.54 feet per second, giving a bottom velocity of 2.72 feet per second, a velocity sufficient to scour large gravel and small stones. The action of the water moving between the dikes at so great a velocity will, in a bottom like the one under consideration, be very rapid, and but a short time will elapse before a channel of the calculated dimensions will be obtained. As regards the maintenance of this channel by the proposed works of improvement, the Board would say that this depends entirely upon the maintenance of the "basin" above the dam. It is a well established principle of hydraulic engineering that after the regimen of a channel has become stable, it will remain so as long as the velocity of the current remains the same; any disturbing cause that effects this velocity will have a corresponding effect upon the regimen of the stream.

The erection of the proposed works of improvement will cause a more rapid silting up of the bottom of the basin than is at present taking place, and when this silting up has so far progressed as to diminish the prism of scour, a corresponding decrease in the velocity of the ebb current will follow with a corresponding silting up of the bottom of the channel. An examination of the comparative cross-sections across that part of the flats included in the basin, shows the amount of deposit made in the last forty years, and shows, also, that it has been much more rapid in those portions near the channel.

Until the silting up in the basin has reached the plane of mean low water, no decrease of the prism of scour will ensue; above that plane the prism will be affected, causing a corresponding decrease in the velocity of the water through the channel with corresponding injurious results. The silting up in the basin will be more rapid in the proximity of the dikes, and there will be found in a few years that this silting up will have reached such a stage as to require attention. The length of the time that will elapse before this silting up of the bottom

of the basin will have attained such a stage as to materially diminish the prism of scour, is simply a matter of conjecture: no definite period can be assigned for this. At intervals, when it is found that the prism of scour has become diminished to an injurious extent the basin will have to be deepened by dredging or some other means.

As regards the gates in the dam the Board would say that they are experimental. They seem to possess much merit. The method of operation is new and the estimated cost is small. The mechanism for the automatic operation is worthy of a trial, and should it not prove satisfactory can be easily and economically modified so as to become effective.

The part most liable to prove unsatisfactory is that contained in the first tank, devised to operate the valve leading into the second tank, wherein is located the float designed to operate the gates. For the details of construction of the gates and their mode of operation the Board refers to the appended paper and drawings. This work of improvement being permanent in its nature, the Board is of the opinion that the piling and sheet piling in both dam and dikes are too light, and would recommend that this part of the work be made heavier than shown in the plans.

As regards the estimated cost of the proposed work the Board would say that having carefully considered the estimates prepared by Mr. Menocal, it has added thereto $30,000 to meet the expense of the modifications heretofore recommended in the dam and dikes, making a total estimated cost of $91,373.

In the estimates, as prepared by Mr. Menocal, $40,000 additional are allowed for dredging in the channel. This amount is considered ample.

After a full consideration of the plans and estimates as submitted by Civil Engineer A. G. Menocal, U. S. N., the Board recommend the erection of the works as modified in this report.

Very respectfully, your obedient servants,

A. A. SEMMES,
Commodore and President of Board.
RICHARD W. MEADS,
Captain and Member.
H. L. HOWISON,
Commander and Member.
M. T. ENDICOTT,
Civil Engineer and Member.
U. S. G. WHITE,
Civil Engineer and Member.
W. H. JAQUES,
Lieutenant and Member.
THOMAS C. McCOLLOM,
Civil Engineer and Member.

Hon. W. E. CHANDLER,
Secretary of the Navy.

COMMANDANT'S OFFICE,
Navy-Yard, Washington, D. C.

Forwarded February 3, 1883.

JAMES A. GREER,
Captain, Commanding.

REPORT OF THE CHIEF OF THE BUREAU OF EQUIPMENT AND RECRUITING.

NAVY DEPARTMENT,
BUREAU OF EQUIPMENT AND RECRUITING,
Washington, October 29, 1883.

SIR: I have the honor to submit the following report of the operations of this Bureau during the past fiscal year, together with accompanying detailed estimates for the fiscal year ending June 30, 1885.

During the past year 74 vessels have been wholly or partially equipped under this Bureau, at an expenditure for labor, $57,532.04, and for material, $491,721.11; making a total, $549,253.15.

For the present fiscal year Congress appropriated, under appropriation "Equipment of vessels," $800,000, notwithstanding the Bureau's estimate of $896,000, which was based upon the actual wants of the service. This sum is again asked for, under said appropriation, as actually necessary for the fitting out and keeping in repair the number of vessels contemplated to be retained in commission during the ensuing fiscal year.

The Bureau also submits, under appropriation "Increase of the Navy," an estimate for $113,000, as being necessary to the completion of the monitors, the new cruisers, and the dispatch boat authorized by law and in process of construction.

COAL.

There have been purchased, at home and abroad, 44,977 tons of coal; costing, including freight and handling, $346,533.08. In this connection I have to state that the contemplated establishment of a coaling station at Magdalena Bay, Lower California, has been abandoned, the Mexican Government having refused permission to land coal in that locality for the use of our cruisers. The present coaling station at Pichilinque will, therefore, have to be retained.

ROPE-WALK.

The following cordage has been manufactured:

	Pounds.
Manila rope	237,030
Hemp rope	142,450
Hide rope	3,593
Wire rope	36,196

Two small forming machines for wire cordage were also manufactured, and repairs made upon the engines, boilers, spreading and spinning machines, &c., by the machinists attached to the rope-walk.

There have been purchased 50 tons of Manila hemp, costing $13,983.34, and $50\frac{163}{224}\frac{8}{0}$ tons Russia hemp, costing $9,892.33.

FORGE AND ANCHOR SHOP.

In this shop, in which the iron-rolling mill is located, a large quantity of chain and bar iron of various sizes, plate-iron for galleys, and blooms for equipment work has been turned out for this Bureau and the Bureaus of Construction and Repair and Steam Engineering.

In addition to the above, twelve "rollers," for bending boiler-plates, ranging in length from 17 to 18 feet and 15$\frac{3}{4}$ inches diameter, were forged

for the Bureau of Steam Engineering, as well as a number of forgings of different descriptions for the same Bureau and the Bureau of Ordnance.

The actu ' weights of iron manufactured in this shop during the year are—

	Pounds.
Chain-iron	63,984
Bar-iron	229,074
Angle-iron	1,151
Plate-iron	55,655
Hammered iron	4,660
Forgings	151,861
Blooms	85,000
Total	591,385

In this shop two scrap furnaces, in which bituminous coal was used with natural draft, have been changed to blast furnaces, and coke substituted for the coal. Previous to this change considerable difficulty was experienced in consequence of "red shortness," but since the use of coke a much better quality of iron has been obtained.

SMITH AND CHAIN SHOP.

Frequent experiments have been made in this shop during the year with low-grade steel of different qualities, to determine its welding properties, with a view to its use in the manufacture of chain cables.

Recent experiments with some steel procured from a manufacturer in Pittsburgh, Pa., have given the most satisfactory results. In a test of 12 triplets of this steel of 1½ inch, 7 of them broke through the butt, bearing a strain nearly equal to the standard proof for 1¾-inch iron, while the others gave way in the weld with a strain equal to the standard proof for iron of that size.

A steel cable of 30 fathoms, 1½-inch bar, is now being made for issue to some vessel in commission for practical test.

During the year about 1,800 fathoms of chain cable of various sizes, for general issue, besides numerous smaller articles, have been manufactured in this shop.

GALLEY SHOP.

There have been manufactured, during the year, one large range (double front), of Mr. Young's latest patent, which, after satisfactory trial on board the Vermont, has been placed on board the Trenton, and two of smaller size on the Wyandotte and United States Fish Commission steamer Albatross. In view of their many advantages over the galley now in use, the Bureau recommends and proposes their adoption for general use in the service, after further trial, which is believed will prove perfectly satisfactory.

Besides this work, several new and a number of old galleys have been made, altered, or repaired; also numerous other articles, consisting of stoves, cooking utensils, &c.

COASTERS' HARBOR ISLAND.

This island having been ceded to the Government, a regular station has been established there for the training of boys, under the command of Commodore S. B. Luce.

Congress appropriated for the current fiscal year, "For the continuation of the wharf for rigging and sail loft and for a drill-hall" on that

island, $45,000, in pursuance of which the Bureau has entered into contracts for the erection of a building for a rigging and sail loft and drill-hall, and for retaining walls, causeway for wharf, and for dredging.

These contracts have exhausted nearly the whole sum appropriated, leaving nothing for building the continuation of the wharf, and the Bureauois thus necessitated to ask in the estimates for the sum of $35,000, as abstlutely necessary for the completion of the wharf, for heating appara us for the buildings, for a proper water supply for same and for repairs of the old causeway.

TRAINING SHIPS.

In this connection the Bureau would state that, although costly repairs have been made from time to time upon all the training ships in commission, they are still in bad condition, and require further and extensive repairs. In view of this fact, the Bureau would earnestly recommend that authority be asked from Congress to build in our navy-yards at least two wooden vessels for this service, of 900 tons capacity each.

The building of these vessels will only necessitate an appropriation for labor, as the Bureau is informed that there is plenty of material on hand which can be utilized for this purpose. On the score of economy it would be a wise and judicious measure to build these vessels, as the constant repairs necessary to the old training ships will be obviated, and the material now on hand, by using it for building new vessels, will be saved from deterioration and loss to the Government; besides, as soon as these vessels were completed, the old ones could be used to great advantage as stationary school ships for the training system.

ENLISTED MEN.

On the 30th of June, 1883, there were 6,640 enlisted men in the Navy, exclusive of boys, and during the past fiscal year 5,064 were enlisted to replace the deficiencies caused by death, desertion, and discharge.

I again renew and urge the recommendation of last year, that some special legislation be made by Congress with a view to supplying men for the Coast Survey, Fish Commission, and Naval Academy; thereby avoiding the frequent embarrassment in which the Bureau is placed when called upon to supply men for these branches of the governmental service, when the small force allowed the Navy may be needed for manning regular cruising vessels.

The conduct reports from the cruisers, with but few exceptions, continue to exhibit a marked improvement in the conduct of the enlisted men, and as a natural sequence the number of desertions is comparatively small.

NAVAL APPRENTICES.

At the close of the fiscal year there were 1,136 boys in the service, of which number 647 were serving on the training ships and 489 on board of nineteen cruising vessels, being distributed among the several squadrons as follows:

On the North Atlantic Station	180
On the South Atlantic Station	73
On the European Station	70
On the Pacific Station	59
On the Asiatic Station	107

The training ship New Hampshire, stationed at the headquarters, Coasters' Harbor Island, is employed in preparing the boys for the more advanced instruction and exercise on board of the cruising training ships Saratoga, Portsmouth, and Jamestown.

When sufficiently qualified for the general service, the boys are transferred to the regular cruising vessels of the Navy, where they remain until they become twenty-one years of age.

The Minnesota, at New York, has been employed more particularly as a recruiting ship, with very gratifying results, having enlisted 596 boys, or more than 72 per cent. of the entire number received during the year' viz, 824. Of 3,275 applicants for enlistment, 1,937, or about 59 per cent.' were rejected on account of physical or other disqualifications; 1,388, or about 41 per cent., being accepted as qualified for the service. Of the latter number, about 62 per cent. were enlisted, the rest having failed to secure the consent of their parents or guardians, or failed to satisfy the recruiting officers as to character, &c., and only about 25 per cent. of the total number of applicants were actually enlisted in the service, which is about the customary ratio.

The reports of commanding officers regarding the apprentices under their command show commendable progress in the training of the boys, and in the system adopted. Punishments have not been necessary to any great extent, owing to the fact that a better and more intelligent class of boys has been obtained.

Applications are constantly being received from the commanding officers of cruising ships for an increase of the complement of apprentices on board their vessels, and the Bureau earnestly recommends that application be made for such modification of the law as will authorize the enlistment of at least one thousand boys annually, which number can be readily absorbed by the regular cruisers. During the year, 176 apprentices have been discharged with honorable "continuous-service certificates," by reason of expiration of seavice, of which number 97 have received "certificates of commendation."

The regulations provide that apprentices who attain a certain degree of proficiency and are unexceptionable in conduct may, after re-enlistment for three years, be assigned to a class for more advanced instruction as seamen gunners. A number of them are now serving in that rating, and one has been appointed an acting gunner, under the provisions of section 1417, Revised Statutes of the United States, as amended May 12, 1879.

From present experience the Bureau is perfectly satisfied that the time is not far distant when the service will be amply supplied with a class of young and intelligent sailors who will be a pride to the nation, and should the emergency arise will prove themselves an honor to the country.

Respectfully submitted.

Your obedient servant,

EARL ENGLISH,
Chief of Bureau.

Hon. W. E. CHANDLER,
Secretary of the Navy, Washington, D. C.

REPORT OF THE CHIEF OF THE BUREAU OF NAVIGATION.

NAVY DEPARTMENT, BUREAU OF NAVIGATION,
November 1, 1883.

SIR: I have the honor to submit the following report of the Bureau of Navigation for the past year, together with the estimates for its support, and for the expenditures that will probably be necessary for the fiscal year ending June 30, 1885.

Included in this report, and transmitted herewith, are the reports and estimates of the several offices under its control.

NAVIGATION.

Compasses.—The form of compass hitherto in use required frequent repairs, and after being submitted to a series of tests, has been found to have insufficient directive force and sensibility. A new form of float has been adopted, a sapphire cap has been substituted for one of agate, the number of needles has been increased to four, and the compass, as modified, will have greater directive force and increased sensibility. To insure the best compasses only being received, all of their parts are sent to the Bureau for inspection. If after a thorough examination, which extends to the measurement of the magnetic strength of each needle, the various parts prove satisfactory, they are returned to the makers to be put together.

In order to prepare naval officers generally for the transition from wooden to iron and steel ships, and to aid the inquiry into the subject of the magnetism of ships, new forms for reports of compass deviations have been substituted for those formerly in use. From the commanding officers of many of the vessels in commission satisfactory observations have been received.

The reasons given last year for the erection of a suitable building in which to test the compasses for the use of the Navy have additional force because of the construction of the four steel cruisers and the completion of the five monitors authorized by Congress. A complete set of instruments for its equipment will soon be in possession of the Bureau, and I have therefore submitted an estimate for the construction of a simple and inexpensive structure of non-magnetic materials.

Determination of longitudes.—The results of the observations made by naval officers under Commander F. M. Green for the telegraphic determination of longitudes at various points from Vladivostok to Madras, referred to in my last report, have been published and distributed to various scientific institutions and societies, and to individuals interested in the subject.

To complete the measurement of differences of longitudes over existing ocean cable lines, a party of naval officers under Lieut. Commander C. H. Davis has determined the longitudes of Galveston, Tex., and Vera Cruz, Mexico, and are now engaged in establishing positions on the Pacific coast, south of Panama.

Navigation supplies.—The steamer Trenton has been lighted throughout with electricity. The electric plant consists of an Armington-Sims high-speed engine, an L dynamo, an automatic regulator, and the necessary "leads" and safety appliances for 250 incandescent lamps, supplied by the "Edison Company for Isolated Lighting." As the Trenton is the first United States naval vessel lighted by electricity, her commanding officer has been directed to report in detail upon the practical effects of

the routine work of a ship of war upon this system of lighting, and upon its efficiency and cost in comparison with other methods.

With the view of reducing the expenses of the Bureau in order not to exceed the amount appropriated, mineral oil has been adopted for illuminating purposes in the receiving and stationary ships.

Additional books have been supplied to the libraries of cruising vessels; and in this connection I beg leave to urge the necessity for the limited appropriation for which I have asked, in order to publish in convenient form such information obtained from leading professional periodicals and from other sources as will be of value to naval officers, to the Merchant Marine and to the shipbuilding interests of the country. It is only by republishing extracts from the large number of periodicals devoted to professional matters that a knowledge of the changes constantly going on in the naval profession can be supplied to our vessels of war.

In consequence of the small annual appropriation for the purchase of navigation stores, and the necessity for making purchases of small quantities frequently, it has been found almost impracticable to advertise for proposals. When, however, purchases have been made in open market, bids have been invited from reputable firms dealing in the supplies required, and the lowest has invariably been accepted.

Through the courtesy of the Light-House Board, illuminating oils, which constitute the largest item in the expenditures under this Bureau, are obtained at contract prices from the Light-House Establishment, which advertises annually for proposals. In consequence of the large quantities of oils purchased by the Light-House Board, and the careful inspection and rigid tests applied to them, our vessels are not only supplied with better qualities of oils, but at lower prices than could otherwise be obtained.

Library.—During the past year the books in the Department library have been rearranged, new books have been added as far as practicable, and a catalogue has been nearly completed. As the library for many years received little besides public documents and odd volumes from ships' libraries, many of them duplicates, it has been impossible to do more than make a beginning. The need of a suitable working library for the Department is so great, and the inconvenience of being without it is so serious, that an appropriation of $5,000 is recommended, to purchase indispensable professional books.

I would renew the recommendation made in my last annual report, that the restrictions now imposed upon the binding of books for the library be removed, and that it be placed, in this respect, on the same footing as the library of the Department of State. I would also recommend that the library should be authorized to exchange its duplicates.

Regulations for preventing collisions at sea.—I desire to renew the suggestion made in former reports, that Congress be requested to adopt the Revised International Regulations for preventing collisions at sea, and thus do away with the confusion which now exists, in consequence of the differences between the regulations adopted by all other maritime nations and the laws of the United States, and which is likely to cause loss of life and property.

In connection with the rules for preventing collisions at sea, I desire to again call attention to the importance of modifying (so far as inland navigation is concerned) Rules 17 and 20 for preventing collisions on water, chapter 5, page 818, Revised Statutes of the United States, second edition, 1878.

These rules give vessels of shallow draught propelled by sails the right

to hold their course in the narrow channels of our bays and rivers, which in many instances have been deepened at great expense; and require steamers of the heaviest draught and largest size to keep out of the way. To comply with these rules is often impracticable, and the attempt to do so results in collision or in the grounding of the deeper draught vessel; in either case causing delay and loss to owners and underwriters.

I would respectfully recommend such modifications to Rules 17 and 20 as will insure in deep and narrow channels the right of way to the deep-draught ships, in localities where light draught vessels will not be liable to injury by using shoaler water.

HYDROGRAPHY.

The survey of the west coasts of Mexico and Central America has been continued by Commander Philip and the officers of the Ranger. The survey has been completed as far as the Gulf of Fonseca, and plates of this part of the work are being engraved. Work on this survey is progressing south and east of the Gulf of Fonseca under Commander Clark, who relieved Commander Philip on the 6th of October last.

Commander Kellogg, in the Tallapoosa, searched for reported dangers in the Yucatan passage off Cape San Antonio, island of Cuba. The examination proved that the dangers do not exist.

Commander Wildes, in the Yantic, found and located Marion Rock, which from its uncertain position had been considered dangerous to the navigation of the Straits of Florida.

Commander Reed and the officers of the Alliance surveyed the entrance to Tampico, Mexico, and the river as far as that city.

Commander Barker, in the Enterprise, without any appreciable delay on his way to the East Indies, ran a line of deep-sea soundings across the Atlantic Ocean to the Cape de Verde Islands, thence to the Cape of Good Hope. Soundings were also made off the coast of Madagascar, in the Mozambique Channel, and across the Indian Ocean.

For want of a definite sum of money, or of an additional printing press in the Navy Department for printing "Notices to Mariners," important information in regard to the positions of wrecks, obstructions in channels, changes of buoyage, and alterations in lights, cannot be given to the Navy and Mercantile Marine until after the lapse of such an interval of time as to often make the information of no value.

In order to more readily supply navigators with the maps, charts, and nautical books which the Hydrographic Office is authorized by law to sell at the cost of printing and paper, additional agents have recently been appointed in the cities on the coast, instead of restricting the agency to one firm in each city.

In continuation of the scheme proposed and begun by Lieutenant Maury, the suggestion as to the publication of a weekly wind and current chart to contain information strictly nautical in character is a practical one, and is recommended.

In connection with the report of the officer in charge of the Hydrographic Office, I have the honor to call your attention to his suggestion in relation to the importance of printing charts from electrotypes taken from the engraved plates of surveys, instead of from the plates themselves. The latter process is an expensive one, and the appropriation asked for in order to electrotype the engraved plates is in the interest of economy.

Your attention is invited to the statement as to the great cost of reproducing certain foreign charts, and to the recommendation that the

work of the Hydrographic Office in future should be more especially directed to the production of new charts from surveys made by our own officers.

I would also call attention to the recommendation as to the necessity of making new surveys of portions of the north coast of South America, of the island of San Domingo, and of various reported dangers in the Pacific Ocean. The charts of these localities are very imperfect and are known to be incorrect.

NAVAL OBSERVATORY.

The report of the Superintendent of the Naval Observatory treats in detail of the work performed with the several large instruments; of the addition of a temperature room for the more perfect testing of the chronometers issued to naval vessels, and of the proposed competitive trial of chronometers made in the United States; of the transmission of time signals, and of the computations made and publications prepared at the Observatory.

A large number of nautical instruments belonging to the Bureau have been examined and tested at the Observatory. This examination has developed the existence in many of the instruments of serious defects, which render them unfit for issue to the service.

I desire to invite your attention to the suggestion of the Superintendent, urging that a special appropriation be obtained with which to print the Observatory publications that have been ready for several years, but have not been printed on account of the insufficient amount appropriated for the printing and binding of the Navy Department. The great demand for these volumes renders their publication very desirable.

The Naval Observatory is prepared to give the time at any point in the United States to those who are prepared to receive it.

I desire to call attention to the defective construction of the buildings of the Observatory, and to the unsuitableness of their location, so often mentioned in previous annual and special reports, and to urge the necessity for an appropriation for the erection of new buildings, according to plans which have been approved by astronomers throughout the country, on the site selected by a commission appointed for the purpose and purchased by the Government.

Transit of Venus.—The observations for the recent transit of Venus were made by the parties at the stations mentioned in my last report, under instructions from the commission provided for by Congress, and of which the Superintendent of the Naval Observatory is the chairman. The sky was perfectly clear at half the stations on the day of the transit; at the others the work was more or less interfered with by clouds, but at no one station was there complete failure.

NAUTICAL ALMANAC.

The report of the Superintendent shows that the work of the office in preparing the annual volumes of the Nautical Almanac and Ephemeris is well in advance, the greater portions of those for 1887 being in type.

The discussion of the observations and experiments for determining the velocity of light, which were interrupted by the absence of the Superintendent in charge of the party observing the transit of Venus at the Cape of Good Hope, will soon be completed.

I invite your consideration to his suggestion that it may be well to consider the practicability of issuing an almanac more especially adapted

to the use of coasting vessels, to contain additional information which would be of service to the large class engaged in the trade between our seaports.

Very respectfully,

J. G. WALKER,
Chief of Bureau.

Hon. WM. E. CHANDLER,
Secretary of the Navy.

UNITED STATES HYDROGRAPHIC OFFICE,
Washington, October 20, 1883.

SIR: As directed by the Bureau, I have the honor to submit the following report on the condition of the Hydrographic Office as found by me when ordered to take charge on June 30, 1883, together with an abstract of the operations of the office for the fiscal year ending with that date, as shown by the records. In addition to the above I have thought it proper to state at length what appears to be the especial purpose of the office, and in connection therewith to submit recommendations for increasing its usefulness in the furtherance of the maritime interests of the country. To illustrate this statement it will be necessary to touch briefly upon the early work of the establishment.

PREVIOUS WORK OF THE OFFICE.

Lieut. M. F. Maury when in charge of the Naval Observatory and Chart Depot, which was at that time under the Bureau of Ordnance and Hydrography, began the collection of information from the logs of vessels, according to a carefully devised scheme, for the purpose of making charts to show the prevailing winds and currents, their limits and general characteristics, and, in general, all the physical features of the ocean, including its meteorology, the limits of icebergs, the feeding grounds of whales, and all facts of interest and value to the maritime community. It was a long time before important results were obtained, but gradually mariners of all nations became interested and sent their logs for examination. From the data thus gathered Lieutenant Maury constructed his famous wind and current charts and wrote his sailing directions. These charts and sailing directions have become known the world over, and the routes therein laid down for passages are followed to this day. It was estimated that the saving of time by the routes thus determined was equivalent to many millions of dollars annually. Two hundred thousand of the charts and twenty thousand of the sailing directions were distributed gratuitously to the masters of vessels who had contributed their logs. The continuance of this work, of invaluable benefit to the maritime interests of the world, was interrupted by the war, Maury's last publication appearing as Monograph No. 3, in May, 1861.

The Hydrographic Office was definitely established by the act of Congress approved June 21, 1866, now embodied in the Revised Statutes, as follows (§ 431):

There shall be a Hydrographic Office attached to the Bureau of Navigation in the Navy Department, for the improvement of the means for navigating safely the vessels of the Navy and of the mercantile marine, by providing, under the authority of the Secretary of the Navy, accurate and cheap nautical charts, sailing directions, navigators, and manuals of instructions for the use of all vessels of the United States, and for the benefit and use of navigators generally.

An appropriation was made at about the same time for the purchase, from Messrs. E. & G. W. Blunt, of New York, of Bowditch's Navigator and of a number of copper plates of charts of the several oceans and of the waters adjacent to the coast of the United States, but not including the coast lines. A new edition of the Navigator was published, and charts were printed from the plates and sold to the merchant marine as they were called for. The plates of Maury's Wind and Current Charts were turned over to the Hydrographic Office, as well as those prepared under a special appropriation from the surveys made by the expeditions under Wilkes, Rodgers, Perry, and Page. To supply our ships-of-war with charts of every part of the world, copies were purchased of those published by the British admiralty. A considerable number of admiralty charts have been reproduced, some in copper plate, but the greater part by photolithography. The latter method commended itself as being at the outset a cheap and rapid method of chart-making, but, for reasons that will be explained later, it has become in the end a source of expense and inconvenience. Its disadvantages have been represented annually to the Bureau, and in 1882 an appropriation of $15,000 was made for the transfer of the photolithographic charts to copper. Contracts covering this amount have been made, and the copper plates are now being received.

As provided for in the statute establishing the Hydrographic Office, books relating to navigation, sailing directions, and other information of use to the navigator have been prepared from time to time and published, correspondence has been carried on with foreign hydrographic offices, and the information thus obtained has been republished in the form of Notices to Mariners, which have been distributed gratuitously to marine agencies and insurance companies and to masters of vessels who have applied for them.

Efforts were resumed in 1873 to collect meteorological data from the merchant service for a new edition of Maury's charts, and with the additional information obtained during the last twenty years from the logs of our ships-of-war, a set of charts for the North Pacific has been prepared and published.

The work of the office, as now organized, is arranged in six divisions: Plate and printing; charts; British admiralty charts; books; notices and archives; drafting and engraving; and meteorology.

PLATE AND PRINTING DIVISION.

The copper plates belonging to the office in the plate and printing division, and available for use in printing, are as follows:

Purchased from Messrs. Blunt	27
Exploring expedition plates transferred to office	112
Prepared by office, finished	140
Prepared by office, unfinished	25
Maury's Wind and Current Charts	24
Total	328

The number of charts printed from the above plates during the year was 9,997.

The original cost of engraving the 165 plates prepared by the office has been upwards of $150,000.

From an examination of the various Government offices, and of private copper-plate printing establishments in New York, it appears that it is the universal custom to make at least one electrotype or alto of all engraved plates. From this alto a second electrotype or basso is made

from which impressions can be taken. The original plate is thus relieved of wear and its life is prolonged indefinitely, since new electrotypes can be made from it at any time. The practice of electrotyping plates has not hitherto prevailed at the Hydrographic Office, only 5 out of the 328 plates having been reproduced in alto, and only 4 of these in basso. As a measure of economy, all the plates in the office should be immediately electrotyped. Unless this is done, it will be necessary to recut the plates as they wear out. Many of them already show signs of wear. By electrotyping before the deterioration begins, and printing from the basso, which is in every respect a perfect copy, the original will be permanently available for new electrotypes. As the cost of electrotyping is less than 5 per cent. of that of engraving, and as an indefinite number of reproductions can be made by the process, the importance of applying it to all the plates before they become imperfect needs no further argument. I have submitted an estimate of $5,000 for this purpose, and also an estimate for the employment of an electrician in the office to perform the work.

CHART DIVISION.

The chart division has charge of all charts kept for issue to vessels except original charts of the British admiralty. They include charts printed from copper plates in the plate and printing division; reproductions on stone of British admiralty charts, together with a few original French charts; and charts of the United States Coast Survey.

The number of copies on hand June 30 was as follows:

Designation of charts.	Number of charts.	Number of copies.
From copper plates:		
Blunt's charts	27	
Exploring expedition charts	112	16,000
Office charts, finished	140	
Office charts, unfinished	25	
Maury's charts	24	22,000
From stone	516	88,000
	833	115,000
Deducting the wind and current charts	24	23,000
Total sailing charts	814	92,000

The number of charts issued during the year was as follows:

To ships of war	3,539
To merchant vessels transmitting meteorological journals	837
To home correspondents and libraries	481
To foreign hydrographic offices (exchanges)	519
To agents, for sale	5,628
To navy-yards and Government offices	1,163
Total	12,167

4,609 Coast Survey charts were received, and 3,718 were supplied to ships of war.

The number of charts sold to agents during the fiscal year was as follows:

	Copies.
27 copper plates (Blunt)	2,817
74 copper plates, office	1,190
26 copper plates, exploring expedition	111
Total of engraved charts	4,138
172 on stone (photolithographic)	1,490
299	5,628

ADMIRALTY CHART DIVISION.

The hydrographic office connected with the British admiralty has published a series of charts numbering about 3,000, and representing bodies of water in all parts of the world. From 75 to 100 charts are issued and about double the number receive important corrections annually. The series forms the most complete collection in existence, and the navigators of all countries, whether naval or mercantile, must rely primarily upon this office for their charts. Of these publications the admiralty chart division of the Hydrographic Office keeps at all times a supply. At present the aggregate number of copies on hand is 16,000, representing 2,300 charts. Every new chart and every chart having important corrections is received from the British admiralty at the Hydrographic Office as soon as issued. It has hitherto been the practice, upon the receipt of a new edition of an admiralty chart, to correct from it the old copies on hand in the office. These corrections, made upon each copy of the chart in pen and ink, not only involved great labor and expense, but were of necessity imperfectly made. While slight corrections must continue, as before, to be entered by hand, it is now proposed, in the case of new editions, to adopt the simpler and far less expensive plan of replacing the old copies by the purchase of new ones.

Since the first of July the whole collection has been carefully examined and several thousand have been found to be so old and imperfect as to be radically defective guides for the navigation of vessels. They have consequently been condemned and new charts of the latest date have been ordered to replace them.

As admiralty charts are sold at an average price of 2*s.* a copy, and as the cost of correction of a seriously defective chart may amount to $25 a copy, there can be no question as to the wisest policy for the office to pursue.

The production of sailing charts is in some respects the most important function of the Hydrographic Office. Of the 789 charts issued by the office, those which embody the results of the exploring expeditions, 112 in number, are original. Thirty of the 140 office charts are also based upon original surveys made by United States vessels. The remaining 647, or 80 per cent of the whole number, are reproductions of foreign charts, mainly those of the British admiralty.

It has hitherto been the policy of the office to devote a large portion of its energies to this work of reproducing foreign charts. One-fifth of the whole number of publications of the British admiralty have been copied on stone or on copper and the charts printed therefrom have been stored in the office. They are kept for the double purpose of issue to ships of war and of sale to private individuals. It is a question whether they are of any material benefit. The copper plate reproductions are exceedingly costly. They have, however, an advantage over the photolithographic copies, in that corrections may be made on the copper and new copies may be printed from the plate as corrected.

The photolithographic reproductions, while less expensive at the outset, can only be corrected by alterations on each copy of the chart in pen and ink. The waste of labor and the waste of money in this hand correction of 83,000 charts is simply inconceivable, and, moreover, it could not be adequately and accurately accomplished with even unlimited labor and money. The office has for some time made the attempt to perform this task, but after a protracted trial the conviction is formed that it is impossible, and that, if it were possible, it would not be worth the effort. The obsolete charts, instead of being laboriously corrected, should be

replaced by the purchase of new editions from the corrected plates of the British office. The conclusion is therefore irresistible that no more copies should be made of foreign charts by a process which does not admit of correction on the original plate or stone. It is a further question how far reproductions of any kind are desirable. Certainly, if the policy of reproduction is a sound one, it should be clearly apparent why these particular 620 charts were chosen for reproduction and the 2,380 others on the admiralty catalogue were rejected. It is impossible, however, to ascertain any general principle which has hitherto governed the selection. The copies form a miscellaneous collection, comprising localities widely distributed and of varying degrees of importance, including the waters of every ocean and coasts and harbors on every continent. That most of them serve no useful purpose is evidenced by the fact that of the 620 charts copied, copies of only 216 have been sold, leaving 404 for which there has been no demand whatever during the past year. Many of these last have been issued to ships of war, but an ample supply for this purpose can be obtained by purchasing copies, without the expense of reproduction.

It is my opinion that a certain portion of this work can be continued to advantage, but that it should be confined absolutely to the coasts and waters that are most frequently navigated by the merchant vessels of the United States. In particular, those admiralty charts of the waters adjacent to the American continent, as far as they have been based on actual surveys, should be engraved by this office, in order that, the plates being always here, corrections may be made at once from the information at its command, and mariners supplied with charts of the highest accuracy, which could otherwise be obtained only with considerable difficulty and delay. Within these limits the work of reproduction should be strictly confined.

By limiting this branch of chart work as above described, the Hydrographic Office will be enabled to devote its energies to the work for which it is peculiarly fitted and intended—the performance of its share of general hydrographic work by the publication of original surveys made by officers and vessels of the United States Navy. The British admiralty, extensive as have been its hydrographic labors, has covered only a limited portion of the general field; another portion, that of our own coasts and harbors, is in the hands of the Coast Survey. But much remains to be done in waters frequented by American commerce which neither British nor American surveys have yet mapped out. The Pacific Ocean lies before us; Wilkes' expedition was little more than a reconnaissance, and there are nearly 3,000 reported dangers in the Pacific which have not yet been verified.

The charts of the north coast of South America and of many parts of the West Indies are based on imperfect surveys made many years ago, and are of little assistance to the navigator. Our commercial interests absolutely demand that new surveys should be made in order that adequate charts may be constructed. I would particularly call attention to the Mona Passage, the coasts of Porto Rico and San Domingo, Sabanilla Bay in New Granada, and, in fact, to the entire northern coast of South America.

A number of geographical positions along the coast of South America were established in 1877 by Commander Ryan in the U. S. S. Huron, of which the longitude was based on that of the water battery at Fort Spain and that of the light-house at Aspinwall, which had been established previously by telegraph. These determinations showed errors *in longitude* in the charts of from three to six miles at the positions oc-

cupied. To place correctly on our charts the points thus established, and to connect them by the old coast line, is impossible. A continuous survey should be made to connect these positions and complete the work already partially done.

The work of the United States in this direction has so far been confined to the 112 charts which were the result of the exploring expeditions, and to the recent admirable surveys of the Narragansett, the Enterprise, the Despatch, and the Ranger. These surveys have mapped out, with a completeness and accuracy which have never before been exceeded, the Gulf of California, the waters of the Amazon, the Bay of Samana, and the west coast of Mexico and Central America.

The publication of the results of original surveys by American officers should be the primary work of the naval Hydrographic Office.

DIVISION OF BOOKS.

In the division of books there are 20,000 copies of the publications of this office, of the United States Coast and Geodetic Survey, and of the Light-House Board, and others purchased abroad for the use of our naval vessels. The first only are kept for sale. Several copies of each publication are always kept corrected to the latest date. The correction of the books imposes a heavy burden on the office force, but by arranging the notices to mariners according to separate localities, and by printing yearly supplements embodying the notices for that period, much time will be saved and greater convenience of reference secured.

A supplement to Hydrographic Office publication No. 44, on the navigation of the Straits of Magellan, has been prepared and published.

There have been issued to United States naval vessels, vessels of the Coast Survey, public institutions, and foreign hydrographic offices, 2,390 copies of the publications of the office; 693 copies have been sold through authorized agents.

The charts and books published by this office have been kept for sale by an agent in each of the principal maritime cities, who was allowed a discount of 40 per cent from the office price. No charts could be obtained by individuals or by the trade generally except through this agent, and other chart dealers were obliged to pay him an advance of from 10 to 20 per cent if they wished to sell the Office publications to their own customers. The system of single agencies was of advantage only to the agent, and was, to some extent, an obstacle to the circulation of the publications of the office. It has been thought best to abolish it, and to permit any reliable dealer who may wish to sell our charts to have them on the same terms.

NOTICE AND ARCHIVE DIVISION.

The division of notices and archives contains single copies of 7,000 American and foreign charts, kept for reference. In this division is also filed all nautical information, from whatever source received. During the year there have been received, from twenty-eight foreign hydrographic offices and marine and port departments, 2,150 printed notices. The notices in foreign languages, including Chinese and Japanese, as well as those of nearly every country in Europe, have been translated by naval officers attached to the division. The information obtained from the notices has been republished in notices to mariners, indicating changes of lights and buoys, and in hydrographic notices, indicating changes in hydrography.

During the year, 171 notices to mariners have been issued, containing 934 announcement of changes and 66 hydrographic notices, containing 415 announcements. Five hundred copies of each notice have been printed. They were distributed to the naval stations, the ships-of-war, foreign hydrographic offices, boards of trade, marine insurance companies, and masters of vessels who applied for them.

In view of the urgent character of new information for mariners, and the necessity of promptness in publishing notices, it is important that a specific amount of money should be provided for rapid printing. Under the present system, it is possible that the Department appropriation for printing may be exhausted before the close of the fiscal year, subjecting the necessary work of the office to protracted delays; and even under the most favorable circumstances, with the ordinary routine of requisitions to the Public Printer, a week or ten days will almost surely elapse before the shortest notice can come out.

DRAFTING AND ENGRAVING DIVISION.

This division has been unusually taxed by the extensive corrections made necessary by recent foreign surveys, by reports from the commanding officers of our ships-of-war, and by other special causes. Corrections have been made in 20 charts in manuscript and engraved on the corresponding plates. Minor corrections, such as changes in lights and buoys, and in the position of small shoals, in placing new shoals, and in the removal of those proved not to exist, were made on 64 plates. A detailed statement of the work of this division is appended.

METEOROLOGICAL DIVISION.

The province of the meteorological division is to furnish blank meteorological journals to the masters of merchant vessels who are willing to post them, the masters receiving in return a set of charts covering the route to be traversed. The data obtained from these journals and from the log-books of ships-of-war are condensed for use in the construction of new editions of Maury's Wind and Current Charts. During the past year 54 journals were received from the masters of merchant vessels, and 284 were issued. The compilation necessary for a new chart of the North Atlantic has been finished, and a series of 12 charts on a new and graphic system is now in the hands of the engraver, and will be ready for issue in about one year.

BRANCH OFFICES.

Hitherto the office has not been able to extend the full benefit of its co-operation to the merchant marine, owing to its remoteness from the class of people it was intended to benefit, and to the natural hesitation of the latter to take the initiative in availing themselves of its resources. In order to supply this want, it was necessary to take some steps to bring the office into closer and more direct relations with seafaring men. To this end branch offices have been established in Boston, New York, and Philadelphia, in rooms provided through the generous liberality of the Board of Trade in Boston, and of the Maritime Exchanges in the other two cities. The branches have been placed in charge of officers detailed from this office, with the approval of the Department. Each branch is supplied with charts covering the navigable waters of the globe, nautical works, light lists, and sailing directions, all corrected to date. The plan has the double advantage of placing within easy reach

of masters of vessels all the information contained in the Hydrographic Office, and of enabling the office to obtain, with incomparably greater fullness, accuracy, and dispatch, all the information brought to those ports by incoming navigators as the fruit of their own experience.

GENERAL RECOMMENDATIONS.

In furtherance of the recommendation made in the early part of this report, the office will shortly present a statement of the surveys most urgently needed at the present time, to be executed by vessels of the Navy, showing the size and scale of proposed charts and the extent of coast to be covered. A definite programme should be decided upon and carried out, and the Hydrographic Office should be utilized to publish the results of the surveys.

In carrying out and developing the work begun by Maury, but by methods more in keeping with the spirit of the age, I would recommend the publication of a weekly wind and current chart of the ocean, giving only nautical information. With the increase of commerce, the large number of fast steamers crossing the ocean, and the facilities afforded by the submarine cable, a vast amount of valuable information can be collected weekly. With the methods that have been in use hitherto, the information obtained must lie idle for months, if not for years. A weekly edition of Maury's chart would show, in addition to the information hitherto presented, the track of recent ocean storms and the probable weather at sea for the coming week. It would also be invaluable to the mariner by showing in a graphic form the probable limits of the Gulf Stream, drift icebergs, the best tracks for steamers, reported rocks, shoals, and other marine dangers, the establishment of new lights, and changes in the position of buoys. The necessary information can be collected by the newly-established branch offices, from the captains of ocean steamers and ships-of-war, and from the masters of merchant vessels generally, without cost to the Government. An estimate of $10,000 is submitted as the amount necessary to obtain the plant for carrying this important plan into operation for the first year.

I would further recommend that regular observations be made, on board of the vessels of the Navy, of the most important physical features of the ocean. It is certainly the sphere of the Hydrographic Office to promote investigations of such a nature as shall be of use both to the mariner and to the student of science. The investigations which would be of the greatest advantage and importance are in the direction of wave motion, deep-sea soundings, and ocean temperature. The necessary steps have already been taken by the Department for investigating wave motion, and blank forms for reports of observations have been prepared at this office. In the matter of deep-sea sounding, it is recommended that all our naval vessels should be provided with sounding apparatus, and when cruising in open water should be obliged to sound, especially at points where the depth is not shown on the charts. It would not be many years before these observations would result in the mapping out of the complete contour of the ocean bed, and the existence of all reported dangers could be fully determined.

In reference to the temperature of sea water, it is recommended that more frequent and careful observations should be taken on board our vessels. The observation of surface water alone is not sufficient, but suitable thermometers should be furnished, and temperatures taken to at least 10 fathoms in depth, and, if possible, down to 100. These temperatures will give the elements to determine the actual circulation of

the ocean, and careful observations of the density of sea water will suggest the laws governing this circulation. The above observations, together with detailed reports of all novel phenomena, should be sent in, and the information thereby obtained be made generally available by the publication of monographs prepared and distributed by the Hydrographic Office.

Very respectfully, your obedient servant,

J. R. BARTLETT,
Commander, U. S. Navy, in charge Hydrographic Office.

Commodore J. G. WALKER, U. S. N.,
Chief of Bureau of Navigation.

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REPORT OF CHIEF OF THE BUREAU OF CONSTRUCTION AND REPAIR.

NAVY DEPARTMENT,
BUREAU OF CONSTRUCTION AND REPAIR,
Washington, November 1, 1883.

SIR: In obedience to the Department's order of the 13th of October, ultimo, I have the honor to submit my annual report for the fiscal year ended June 30, 1883, showing work performed and amounts expended, with an estimate of amount required for the purposes of this Bureau for the fiscal year ending June 30, 1885.

The estimates of the expenses of this Bureau, as given in the statement marked A, are in accordance with existing laws.

The estimate for the pay of clerks and writers at the several navy-yards, in the tabular statement marked E, is for services which cannot be dispensed with if the work under this Bureau is to be performed with the same system and correctness as heretofore.

The amount of work doing in the navy-yards does not affect this question. Each and every clerk and writer has specific duties to perform. The same number of reports and blanks is required to be filled up and sent to the Bureau for its information, without regard to the quantity of work on hand.

The estimate marked B is for the general repairs of vessels at navy-yards and on foreign stations; purchase of stores, materials, and tools of all kinds; preservation of materials and stores, and for the general care and protection of the Navy, in the line of construction and repair, &c.

The sum of $400,000 is required to complete the frigate New York, at the navy-yard, Brooklyn, and the Mohican, at the navy-yard, Mare Island, California. A recommendation was made in my last annual report to complete these vessels, but no special appropriation was made for this purpose. The sum of $100,000 was set aside from the appropriation for the fiscal year ending June 30, 1884, for labor and materials for the Mohican, and it is expected that she will be launched by January, 1884; but an additional sum will be required to fit her for sea. This vessel would probably have not been in condition to finish had she remained on the stocks another year; consequently, it was thought best to push her to completion as far as possible this year, and ask for an additional amount to finish her, when the Department would have another available vessel (of the Marion class) for service during the next ensuing *fiscal year*—a class of vessel that has proved entirely successful and sat-

isfactory in every respect, except that of armament, the guns carried being of little or no account. This vessel is 216 feet between perpendiculars, 38 feet breadth of beam, ship-rigged, having a sail surface of 14,150 square feet in her ten principal sails. Like other vessels of her class, she can carry an armament consisting of one 8-inch rifle (muzzle-loader), six 9-inch, one 60-pounder, or its equivalent weight in modern breech-loading rifled guns. Her draught of water, when ready for sea, is intended to be 14 feet 6 inches forward, and 17 feet 6 inches aft, and, at this draught, her displacement will be 1,900 tons.

The New York was designed, and put in frame, by Naval Constructor B. F. Delano, U. S. N. (deceased), in 1865. She is a very fine model, and has a live-oak frame that, from its age and the care taken of it, is in an excellent state of preservation. She is 315 feet on the mean load line, 354 feet over all, 47 feet extreme breadth of beam, 25 feet 11 inches depth from lower edge of the rabbet of the keel to lowest port sill on gun-deck. She was designed to have a ship's rig, having 24,000 square feet of sail surface in her ten principal sails. Her armament could be made equal to the weight of two 100 and one 60-pounder Parrott rifles, and sixteen 9-inch smooth-bore guns. There is no reason why a battery cannot be arranged on this ship to have a direct bow and stern fire from half-turret guns on the spar-deck, and recessed ports on the gun-deck. With modern engines and boilers, the vessel could undoubtedly attain a 14-knot sea speed. Materials for steel boilers for the vessel were purchased last year, and the work on them, as I understand, is well under way in the steam engineering department of the Washington navy-yard.

The plan for completing the vessel can be finished in a short time, whenever the question of completing her is decided, and if the materials of planking, ceiling, decks, and, in fact, all the wood-work used in her, except joiner materials, are first impregnated by the Thilmany process for preserving ship timber, the vessel will be useful for the next twenty years, material so impregnated being thoroughly protected against worm and dry rot.

The displacement of the New York, at a draught of 18 feet 9 inches forward and 21 feet 5 inches aft, is 4,527 tons, and her lowest port-sill would be 8 feet above water.

During the past year the Bureau has taken care to use very little, if any, other than impregnated-wood materials in the work of repairing the Ossipee, Shenandoah, Trenton, and Omaha. Contracts have been made, and 160,000 cubic feet of yellow pine and other material have been impregnated during the past year by the American Wood Preserving Company's process at the navy-yard, Boston, Mass. There is little doubt, from all the information that can be gathered relative to it, that materials treated in this way are rendered secure from dry rot. Material so impregnated has been used extensively in naval vessels during the past five or six years, and the question of their better preservation thereby will be demonstrated upon the return of these ships to the United States from foreign stations. When the Trenton was built, Naval Constructor William L. Mintonye had a piece of wood taken from a green tree and impregnated. This was dressed and used in the port battery, aft of the quarter-gallery port. The vessel was absent from the United States for a period of five years, and on her return Constructor Mintonye carefully examined the piece he put in, which he found to be as *hard and sound* as possible, whilst all around, above and below it, the unimpregnated materials were badly dry rotted and had to be removed.

I am in favor of continuing the use of this process for the preservation of timber, and believe that all ship-timber should be contracted for, to be landed at the navy-yard, Boston, impregnated, and furnished on requisition to other yards when required. I do not, however, consider it to be to the best interest of the Government to contract, from time to time, for the impregnation of small quantities of material, and in the event of failure to keep the company supplied, to run the hazard of being required to pay damages on account of such default. Congress, rather, should be asked to appropriate an amount sufficient to buy the works, which could be operated to advantage by the Bureau independent of the company, paying a reasonable and equitable royalty on the quantity of work done.

The amount appropriated, under construction and repair, for the current fiscal year, will, in my opinion, be entirely inadequate to carry on the work coming under the cognizance of the Bureau.

By the exercise of economy in buying such materials only as were necessary, I have succeeded in saving the sum of $109,817.96 from the last fiscal year, when the appropriation was $1,750,000. This amount should have been expended for materials to put in stock, but was deemed necessary to be used towards the building of the new steel vessels, under act approved August 5, 1882. In 1882, on assuming the duties of Chief of the Bureau, I found the navy-yards of the country almost entirely depleted of such materials as are indispensable for the usual repairs of vessels. In order to do the work a heavy expenditure was rendered necessary for labor and materials absolutely required for the work in hand, without being able to purchase any materials to keep in stock. The latter is essential in the case of wood materials, in order that they may be properly seasoned before using. The facts are that, independent of live-oak timber, there is not a navy-yard in the country to-day that has a sufficient stock of yellow and white pine, cedar, ash, walnut, or other timber and lumber material on hand for the complete repair of any one vessel, and whenever repairs are required and ordered the Bureau has to provide, not only the money to pay for the labor, but must buy the materials at open purchase from time to time as wanted. For the present fiscal year, when most of the work called for is of such a character as to require the purchase of all the materials before mentioned, including paints, oils, hardware, tools, &c., the appropriation is reduced to $1,100,000, or $440,182 less than was used last year by exercising the utmost economy.

The act approved March 3, 1883, which forbids the repair of any wooden vessel of the Navy costing more than 20 per cent. of the appraised value of a new ship of like size and materials, will, in the course of the next three years, largely reduce the number of wooden vessels now on the naval list (some of which we can ill afford to spare), and, in the course of the next five or six years, from natural causes, blot the remaining number of them almost, if not entirely, from the register. Although built of wood, their frames are of live-oak; very many of their models are as good as those of any vessel of their class in the world, but, after a cruise of from three to five years, they cannot, in the majority of cases, be repaired for one-fifth of the cost of a new ship of like size and materials, and, consequently, under the law must be abandoned.

The limit of repairs on all wooden vessels should, in my opinion, be fixed at 33⅓ per cent. of the cost of a new vessel, of like size and materials, unless otherwise recommended by a competent board of officers, until such time as Congress, in its wisdom, may see fit to replace them by *iron or steel* vessels.

There might be good reasons for repairing a hull, with a good model and live-oak frame, where the engines, standing rigging, and most of the spars are good; but if new boilers are required, and even 33⅓ per cent. repairs to the hull, the vessel should not be sacrificed, unless the Navy is in condition to afford it, by reason of having new vessels building better adapted to the wants of the service. Since the passage of this act, the repairs of the following-named vessels have had to be abandoned, with their consequent loss to the service: Alaska, Monongahela, Plymouth, and Ticonderoga. The Monongahela and Ticonderoga have live-oak frames, and could have been repaired for about 25 per cent. of the cost of new vessels of like size. The Alaska was, undoubtedly, unfit for repairs. The Plymouth, whose engines were good, but whose boilers needed repairs, had been hauled up in the ship-house at the Portsmouth, N. H., Navy-Yard. She could, and should now, be repaired, at an estimated cost of about 33 per cent. of the price of a new vessel. She is a fine model, and is one of a class that has had a good record and a successful career in the service. The Ticonderoga could be repaired for 25 per cent. of the cost of a new ship, possibly less, and should not be lost to the service. The Pensacola, now on her way home from the Pacific station, cannot, in my opinion, be repaired under this law; and it is very doubtful if the Richmond can be repaired, for the same reason, when she returns home after being relieved by the Trenton. The Minnesota, used as a training ship, cannot be repaired again, and the limit of her existence is, probably, eighteen months, if not less.

As the estimated cost for repairs of the Colorado is $120,000, and of the Vermont $9,821, the Department has approved the recommendation of the Bureau that the Vermont be immediately fitted as a receiving ship, in accordance with the report of the Board, and that materials of any kind from the Colorado that can be made use of be utilized in the execution of the work; that on the completion of it the Colorado be stripped of all materials that can be hereafter used in the repair of other vessels, and then placed in ordinary to be appraised and sold.

The Wabash, with a house over her, will last some years longer as a receiving ship.

The sheathing over the spar-deck of the Franklin, new covering of poop-deck with canvas, and building of houses over the hatches will render her efficient as a receiving ship at Norfolk for some time to come. I have doubts as to whether the Lackawanna can be repaired at the expiration of her present cruise under the present law. In less than three years the repairs that will be wanted on the Powhatan will be such as to necessitate condemning her under the present law. The frigate Constellation, used as a practice cruising ship for the cadets at the Naval Academy, is greatly in need of repairs, which the Board, ordered to survey her, estimate at $65,739.41; this, in my opinion, will undoubtedly be exceeded, if the repairs are commenced, and I have been compelled to disapprove of its being done, as the amount that would be expended will, in my opinion, exceed the sum allowed by law, although the necessity of having such a vessel as this for the Naval School is very apparent.

The probable life of the Tennessee will not extend beyond twelve months, when she will be past repairing under the present law. Minor repairs have been made on the training vessels Saratoga, Portsmouth, and Jamestown, but the time is rapidly approaching when the work wanted on them will exceed the limit allowed by law, and they will have to be abandoned. Commodore Earl English, Chief of the Bureau of Equipment and Recruiting, in his annual report, will call your atten-

tion to these vessels, which are more particularly under his control; and, at his request, I have asked for a sufficient amount of money in my estimates to cover the labor of building two live-oak framed clipper barques for training vessels.

The appropriation for this Bureau, for the fiscal year ended June 30, 1883, was		$1,750,000 00
Expended from July 1, 1882, to June 30, 1883:		
For labor at navy-yards	$1,253,870 00	
For materials, &c	386,312 04	
		1,640,182 04
Balance on hand July 1, 1883		109,817 96

Vessels repaired at the different navy-yards during the fiscal year 1882-'83.

1ST RATE.	3D RATE.	4TH RATE.
Tennessee.	Alert.	Alarm.
	Adams.	Despatch.
2D RATE.	Alliance.	Tallapoosa.
	Enterprise.	
Alaska.	Juniata.	1ST RATE (used as receiving ships).
Omaha.	Kearsarge.	
Powhatan.	Mohican.	
Plymouth.	Nipsic.	Colorado.
Shenandoah.	Ossipee.	Franklin.
Trenton.	Ranger.	Wabash.
Vandalia.	Swatara.	
	Wachusett.	
	Yantic.	

SINGLE-TURRETED MONITORS.	TUGS.	SAILING VESSELS.
	Catalpa.	Constitution.
Montauk.	Cohasset.	Constellation.
Nantucket.	Monterey.	Dale.
Passaic.	Pinta.	Jamestown.
Wyandotte.	Phlox.	Portsmouth.
	Rescue.	Saratoga.
	Rocket.	

Agreeably to the suggestion, made in my last annual report, the double-turreted monitor Miantonomoh was loaded down to her deep-load draught, by placing on board the equivalent of all weights that she would carry when ready for sea, after which she made a very successful trip from League Island to the Washington navy-yard, making as reported by her commanding officer, a speed of 10 knots with 65 revolutions of the screw and a steam pressure of 63 pounds, having steam up on six boilers only. She has, since then, made a good run to the New York navy-yard, where the work of altering her decks, &c., to receive the new roller base turrets, will soon be commenced, and the turret frames built, ready to receive the turret armor when the contractors deliver it.

Bids for the compound-turret armor were received from one firm only, namely, William H. Wallace & Co., of New York, who represent the Messrs. John Brown & Co., and Charles Cammell & Co., of Sheffield, England. They agree to deliver the turret armor in five months, and the pilot-house armor in ten months from the date of award of contract, which has been made.

The plans for the new turrets and alterations in the decks of the Miantonomoh are completed in detail, and, with the specifications for materials required for the work, are all ready, and will soon be sent to New York.

Since my last annual report the double-turreted monitor Puritan was

launched from the ship-yard of John Roach & Son, at Chester, on December 6, 1882; the Terror, from the ship-yard of W. Cramp & Sons, Philadelphia, on March 24, 1883; the Amphitrite, from the ship-yard of Harlan & Hollingsworth, at Wilmington, Del., on June 7, 1883; the Monadnock, from the yard of Burgess & Co., Vallejo, Cal., on September 19, 1883.

The plans for the alterations of the Intrepid (which was referred to in my last annual report) were referred by the Bureau to a Board at the New York navy-yard, consisting of Capt. E. E. Potter, Chief Engineer George W. Magee, Naval Constructor W. L. Mintonye, and Assistant Naval Constructors J. W. Hoover and Richard Gatewood. The Board unanimously approved the plans, with a few minor changes, and with the approval of the Department preparations are now making to haul out the vessel for the necessary alterations. This will give the service an effective gun-boat, for use in the Asiatic squadron, which now is practically useless for any purpose whatever.

During the civil war the Government had employed nearly the entire number of shipbuilding firms in the North, who, together with the navy-yards, employing nearly every available man, working nights and Sundays, using every available ship-house and slip, were not able to turn out work with the dispatch required. To-day our navy-yards are not in as good condition for doing work as when the war closed, while very many of the firms that were then among the most prominent shipbuilders of the country, more especially in New York and Brooklyn, have gone out of business and the yards no longer exist.

From wooden ships we have gone to iron and steel, with only a very few private firms in the country, who, in the event of war, could commence at once, and carry on, with any degree of rapidity, the building of iron and steel vessels of war.

This great nation should not close up any navy-yard, whether it be thought that there are too many of them to support in time of peace or not; but should, without further delay, place them all in such a condition of effectiveness that there would be ample facilities for building and reparing iron and steel ships in the event of war.

Tools and appliances for building such vessels cannot be manufactured or bought at short notice and fitted up for work; and it would be a late day to commence such work when war is declared. It has been customary for years past to rail against our navy-yards, their inadequacy for doing work, and the manner in which work is done in them; but facts speak for themselves.

The best work the Government has ever had has been done in its navy-yards. Quality is a prime factor in the matter of work, and much more so on an iron than on a wooden ship. It calls for the closest attention, the best professional talent to design and direct the execution of it; and this, it is supposed, the Government has at its command. The next thing, then, to do is to give its professional officers the tools and appliances to work with, and the vessels will be built, if money can be had to build them.

We shall want vessels very soon, as those we have are comparatively insignificant, and are fast disappearing. Nearly every civilized nation on the face of the earth is outstripping us in naval supremacy, and yet, in the face of all this, we are not only doing nothing towards putting our few navy-yards in condition for active service, should an emergency arise, but it is proposed absolutely to close some of them.

I sincerely trust that, if it shall be decided to close any of our navy-yards permanently, Congress, at least, will grant the money that I have asked for, to buy tools and put all the yards in condition for iron ship-

building. To do this would not entail great expense in tools, as it is my opinion that with the present plant on hand for such purposes, and an additional outlay of $150,000, the navy-yards at Portsmouth, Boston, New York, League Island, Norfolk, Mare Island, and Pensacola could be put in condition to build any vessel that is now building, or any vessel that might be built hereafter.

The Intrepid, an iron-armored vessel of 1,150 tons displacement, was built in the Boston navy-yard in 1872, with the plant they then had.

In the New York yard, the Alarm, an iron-armored torpedo ram, was built in 1874. This yard has now a valuable lot of iron-shipbuilding tools.

In obedience to the Department's orders of the 21st and 24th of March, and of the 4th of April, 1883, the plans, specifications, &c., for the 4,500-ton steel cruiser Chicago, and the 3,000-ton steel cruisers Boston and Atlanta, were prepared and submitted for the approval of the Naval Advisory Board. The amount of money that will be required to finish these vessels, including the Dolphin, as well as the estimated cost for completing the double-turreted monitors Puritan, Monadnock, Amphitrite, and Terror, as estimated for by the Naval Advisory Board, is shown on exhibit marked C, hereto appended.

The steel lower masts for the 3,000-ton steel cruisers Boston and Atlanta will be built in the Brooklyn navy-yard during the present fiscal year.

I have to recommend that the money obtained from the sale of vessels afloat, which were recently disposed of, be used so far as may be necessary in the taking to pieces of vessels on the stocks in our navy-yards. Many of them have remained in an uncompleted condition since the late war, some longer, and they must now be taken apart where they are, as they are badly decayed and cannot be launched. This work should be done by navy-yard employès, and not by contract with outside parties; the latter would not be subject to navy-yard regulations, and would claim free use of Government tools and appliances for doing the work. In breaking up these vessels, all the copper, composition, and lead materials can be recovered, sent to the copper-rolling mill at the Washington navy-yard, and reworked with profit to the Government. If private parties find it profitable to come into our navy-yards to break up these vessels, it can be made equally profitable to the Government.

The double-turreted monitors Massachusetts, at the Portsmouth, N. H., navy-yard, the Oregon, at the Boston yard, and the Colossus, at the Brooklyn navy-yard, have iron diagonal truss-frames in them which cost, originally, $157,000 each, and as these frames are all keyed together they can be readily and economically removed from the vessels, shipped to the Washington navy-yard, and worked over into such sizes of materials as may be required for use in new vessels, or repairs of old ones in the future.

In the sale of old materials, which has lately taken place, while the Boards, in some instances, recommended that the plates, turret-gear, &c., belonging to the turrets of the double-turreted monitors before mentioned be disposed of, the Bureau struck those articles from the list, preferring their retention for future use, although the practice in the past has been to dispose of them.

During the late civil war, and up to and including the time of the completion of the Trenton in 1876, the Bureau of Construction and Repair furnished steam windlasses and steam steerers to all vessels requiring *them.* When the new Miantonomoh was building, the Bureau contracted

for and placed on board of that vessel a steam steerer and steam windlass. At the time of her completion, however, the Bureau of Steam Engineering purchased and placed on board a second steam steerer, which has never been made to work satisfactorily, and, for all the use that has been made of it, it might better be put ashore. From that time to March, 1882, by what authority this Bureau is not advised, the Bureau of Steam Engineering supplied many vessels of the Navy with steam-capstan machinery. From March, 1882, in accordance with General Order No. 298, and until that portion of said order relating to the cognizance of steam steerers and steam capstans was revoked by the Department's order of September 28, 1883, this Bureau had control of furnishing steam steerers and steam capstans to vessels of the Navy. During that period it contracted for steam capstans of the kinds and prices as follows:

Name of ship.	Size of chain.	Contract price.	Manufacturer.
	Inches.		
Omaha	1⅜	$5,000	Providence Steam Engine Company.
Kearsarge	1¼	3,750	Do.
Nipsic	1¼	2,500	J. P. Manton, Providence, R. I.
Swatara	1⅜	3,300	Do.
Shenandoah	1⅜	3,300	Do.
Ossipee	1⅜	3,300	Do.
Marion	1⅜	3,300	Do.

After contracting for the capstan machinery of the Omaha and Kearsarge, the Bureau was notified that J. P. Manton, of Providence, R. I., had established a manufactory of capstan machinery, steam windlasses, and steam steerers at Mansfield, Mass. Under instructions from this Bureau, by order of the Department, dated April 2, 1883, Naval Constructors Thomas E. Webb and George R. Boush, U. S. N., were directed to proceed to Providence, R. I., and examine carefully into the details of the steam machinery for operating capstans of vessels of war, as manufactured both by the Providence Steam-Engine Company, of which H. W. Gardner is treasurer, and by Joseph P. Manton, of Providence, and report which they considered best adapted to naval vessels, having in view the weight of the steam appliances, room occuped by the capstans on deck, and their respective capacity for doing the work. They reported, under date of June 14, 1883, that they had visited the works of the Providence Steam-Engine Company, in Providence, R. I., and the works of the Manton Windlass and Steam Steerer Company, at Mansfield, Mass., where the Manton capstans are manufactured; that in the manufacture of capstans by both companies the materials and workmanship were of the best quality and ample in strength. The prices asked to deliver the several sized capstans, the weight and room occupied by each, were reported as follows:

PROVIDENCE STEAM-ENGINE COMPANY.

Price.	Size of chain.	Weight (about).	Room or air-space.
	Inches.	*Pounds.*	*Cubic feet.*
$6,000	2	13,823	40
5,000	1⅝	7,950	25
3,750	1¼	6,455	21

ENGINES, TWO IN NUMBER.

Size.	Diameter.	Stroke.
Inches.	*Inches.*	
2	16	14
1⅞	13	12
1¾	10½	10

MANTON CAPSTAN AND STEAM-WINDLASS COMPANY.

Price.	Size of chain.	Weight (about).	Room or air-space.
	Inches.	*Pounds.*	*Cubic feet.*
$3,800	2	10,000	18
3,300	1⅞	7,000	13½
2,500	1¾	5,000	9

ENGINES, TWO IN NUMBER, EACH.

Size.	Diameter.	Stroke.
Inches.	*Inches.*	
2	12	12
1⅞	10	10
1¾	7	8

They further report that the Providence Steam-Engine Company's capstans are driven by three trains of spur-gear, the Manton by a worm and wheel, and that each system has its recommendation. They call attention to the fact that Chief Engineer Henderson, Assistant Engineer Morley, and Naval Constructor Pook constituted a Board which, under date of October 18, 1876, reported favorably to this Bureau upon a steam windlass erected on board the U. S. Monitor Roanoke, in which the worm and wheel were used.

The Board report, finally, that both systems are recommended by high authority, but that the Manton capstan is simpler in its construction, of less weight and price, occupies less cubical air-space on the deck, and has the capacity to do the work required of it. They therefore recommend the Manton capstan as better adapted for naval vessels.

The Bureau desires respectfully to call the attention of the Department again to the recommendations made by Commodore Stephen B. Luce, president of the Navy-Yard Commission, under date of June last, and to urge the necessity of this Bureau retaining, permanently, the entire supervision of the work of building and repairing vessels of war, over which, through your indulgence, it has continued to exercise control, notwithstanding the recommendation of the commission. I earnestly request that in forwarding to Congress the report of the Commission, you will invite attention to the manifest wrong, and the evil consequences that are likely to follow, if the work, properly pertaining to this Bureau, shall be turned over to the Bureau of Steam Engineering as recommended. The desirability and feasibility of the closing of certain navy-yards, and the concentration of organization, and reduction of expenses in the remaining yards, would seem to be the objects which the commission was organized to consider; and to any but those who either do not practically understand the details of work in our navy-yards, or who

are unduly prejudiced in favor of a system as yet untried, and of doubtful expediency, a continuance of present methods would be recommended. When carefully looked into, and fairly considered, it appears at once, that where concentration is recommended in the memorandum by the Commission, it is principally in the interests of the Bureau of Steam Engineering, taking from under the cognizance of this Bureau a very large amount of the work now done in building and fitting a vessel of war for service, and placing it almost entirely under the control of the Bureau of Steam Engineering. Under no such *régime* could the greatest possible economy of expenditure be accomplished, either under a peace or a war establishment. The first recommendation made "is the abolition of all shops doing the usual work of machine shops, except those of steam engineering." If this were carried out, the work under this Bureau would not be interfered with in its iron-plating shops any more than in the ordnance machine shops, where guns are manufactured; or in the equipment galley shop, where in the Washington navy-yard galleys are made for cooking purposes. The Commission further recommend the abolishment of all boiler and plate-iron shops, except those of steam engineering; and under the several navy-yard lists of foremen, they recommend that the position of foreman of iron-platers be abolished, and that shop placed under the control of steam engineering. The steam engineering departments of our navy-yards have always had boiler-shops, where the boilers of steam vessels were built and repaired, but they have *never* had an iron-plating shop. The department of construction and repair has had, during and since the war, iron-plating shops, but *no* boiler-shops, nor is there any similarity in the work done in them. To those who are without information as to the character of the work done in the construction iron-plating shops, and their intimate relations to all other branches of work coming under cognizance of this Bureau, in the building and repairing of vessels of war, whether of wood, iron, or steel, the recommendation might seem reasonable, there being many tools used in them such as may be found in steam-engine machine shops. But this is also the case in the ordnance and equipment shops, to which the recommendation does not apply.

In order to illustrate fully what an iron-plating shop is, I have to call your attention to the one in the Brooklyn navy-yard; those in the other yards being fitted with tools, to a greater or less extent, of the same general character, and for like use. This building, one of the best in the yard, was erected a few years since, by the Bureau of Yards and Docks, for the purposes of this Bureau; and it has been fitted up, from year to year, as the funds of the Bureau would permit, with modern tools of the best quality for doing the work required in the building and repairing of iron and steel ships, and fitting the immense amount of iron, steel, composition, and brass work, such as iron deck-frames over the boilers in wooden vessels; iron knees, breast-hooks and riders, and diagonal braces and head-straps; boat-davits and cradles; iron and composition hatch-combings; iron and composition hatch canopies; composition cat-heads; iron fish-davits; iron hatch-cranes and fittings; fitting up of capstans and windlasses; iron and composition blocks, and sheaves used for boat-davits, cat-heads, and rigging of masts and spars of vessels; iron and composition work used in building and fitting up of masts and yards; iron and composition work used in connection with the building of boats; fitting up of all pumps in the vessels; fitting up of all air-ports and repairing same; building and repairing of all water-tanks; together with a thousand and one minor fittings used in connec-

tion with the work of the several departments—joiners, plumbers, carpenters, &c.—coming under cognizance of this Bureau. In building iron or steel vessels, the frames, beams, plates, &c., would be prepared, which was done in the past, in building the United States torpedo-ram Alarm, and will undoubtedly be done again in the near future, for it does not seem possible that hereafter the Government intends to have all such work done by contract.

Those who are interested in having the iron-plating shops turned over to the department of steam engineering will probably say that in these shops only, machinists are employed, which is not the case, any more than in the iron ship-building yards of the Messrs. John Roach & Son, at Chester, Pa., W. Cramp & Sons, Philadelphia, or Harlan & Hollingsworth, Wilmington, Del., in each of which establishments the shipbuilding tools, &c., are in separate portions of the yards from their ordinary steam-engine machine tools, and are under the control and direction of foremen, who are experts in their respective branches, one having no connection with the other. Having, in 1870, visited nearly every shipbuilding establishment, public or private, of any importance, in England and Scotland, I can vouch for the fact that their work is carried on in the same general manner.

The building of the turret frames and alterations in the hull of the double-turreted monitor Miantonomoh will be proceeded with during the present fiscal year, and all of the work will be prepared for use in the iron-plating shop of the Brooklyn navy-yard. In the block lists of the new cruisers, as well as of all other naval vessels, are comprised a large number of composition, iron, iron-strapped, and patent-roller bushing-sheaved blocks, all of which are fitted up in these shops; and this is the case also with all the metal work used in building and fitting the boats of naval vessels, consisting of metal breast-hooks, thwart-knees, rowlocks, stem-bands, rudder pintles and braces, metal yokes for rudders, fittings for boats, spars, boat-hooks, &c.

The work before mentioned will, of course, be done under the control and supervision of this Bureau and its representative in the yard, the naval constructor, as no such work could possibly be done properly, efficiently, and economically under the direction of an engineer officer uneducated to superintend such work, and from the very nature of his profession knowing but little, if anything, of its requirements.

The Commission recommend that all coppersmiths' and plumbers' shops be abolished, including the position of master plumber, and such work placed under steam engineering. As a matter of fact, the department of construction has no regular coppersmiths' shops, but it has plumbers' shops, while the reverse is the case with steam engineering. The only plumbing work that the engineering department ever has to do, that I am aware of, is the covering of the felt on their boilers with sheet lead, and very often the construction department does this work for them; while the work of the master plumber in the construction and repair department of our navy-yards consists of the lining of the magazines and shell-rooms with lead; putting in of all flood-cocks, waste and overflow valves, and light boxes for same; fitting up water-closets and latrines for officers and crew; putting in all lead pipes connected with water-closets, pumps for washing decks or for fire purposes, galley pump and scuttle butt; lining the floors with lead in the quarter galleries, men's heads, and firemen's and officers' wash-rooms; lining all air-port or other openings cut through the vessels with lead; making and putting in all pipes for ventilating purposes; putting in all deck scuppers; making, putting in place, and connecting all tanks of

lead or copper used in water-closets, quarter galleries, and general store-rooms; making and fitting complete all bath-tubs and sinks for washing purposes; lining all sail-rooms with zinc, and all bread-rooms with tin; the whole of which, together with many other minor fittings and jobs of plumbing work required to be done in the course of building or repairing a vessel of war, can in no way be classed as work pertaining to the duties of an engineer officer of the Navy, and should be done in the future, as it has always been done in the past, properly, economically, and expeditiously, under the direct control and supervision of this Bureau and the naval constructor of the yard. In no private or public shipbuilding establishment has such an experiment ever been made as the turning of such work over to the control of engineers, and if attempted now it can result only in entire failure, entailing much unnecessary expense in time and money, instead of a saving effected as desired.

The recommendation of the Commission to build all boats and blocks in one yard is not practicable. It would not be economical to build boats and blocks in the East to send to the Mare Island yard, in California; and as there will be only three yards left open on the Atlantic coast, provided the report of the Commission is approved, I should certainly deem it the wiser plan to build all boats and blocks at the yards where the vessels are repaired. There is hardly a navy-yard in the country without boats and blocks on hand, either new or that can be repaired and used. It would be almost impossible to select at an eastern yard such articles as would be required in the course of the work when it is taken in hand at Mare Island, but if it were not done then, the delay in making requisition, the loss of time if the articles were not made exactly according to order, or not in time to meet the demands of the riggers and others, would retard the completion of the work and entail much greater expense than under the present system, where all the work proceeds in such a manner that no delay is occasioned on account of davits and cradles for stowing not being of the proper shape, size, &c. The fact that davits and cradles for boats could not be completed until the boats arrived from the yard where they were building, and the fact that their completion might often be delayed, for some cause or another, will further illustrate the embarrassment. No naval constructor would have concurred in such a recommendation.

The work which pertains to the designing, building, repairing, and fitting of vessels of war, as now carried on in our navy-yards, to be done properly, expeditiously, and economically, must be done in such a manner that the commandant and naval constructor of the yard, acting under the direction of this Bureau, so far as its authority extends, shall be able to direct and supervise all the work for which it is responsible. Concentration of labor will not answer in practice, unless there is a corresponding concentration of responsibility. This Bureau, in other words, should not be held responsible for the proper performance or results of work which is given to another Bureau to perform. It would, in my opinion, be confusion worse confounded to make the changes proposed by the Commission, so far as they relate to this Bureau. They could no more be made to operate without detriment to the interests of the Government than could be the placing of the duties of this Bureau entirely in the hands of steam engineering.

Instead of economizing in the manner proposed, by the saving of a few dollars in the abolishment of a few master-workmen, and turning their work over to steam engineering, thousands of dollars in time and money would be wasted in the several navy-yards by incompetent

direction of work, in the placing it in the hands of those without practical knowledge or experience in the requirements of the work which they would be called upon to supervise and direct.

In conclusion, I sincerely believe that every naval constructor ardently longs that, when his career of active usefulness is ended, and he has gained the right by age, length of service, and honest work to retire, he may see himself succeeded by a man possessing greater knowledge, higher skill, and better training than he has had the good fortune to enjoy; and he should be willing to contribute all that is in his power to the success and advancement of those who are to succeeed him. The progress of science, of discovery, and of improvement is going on at such a pace throughout the whole civilized world that I do not think the very best education we can conceive of, or at present contrive, will be more than sufficient to enable our successors to compete on fair terms with the naval constructors of England and France. It seems to me an unquestionable obligation to those who are to take the places of the present members of the corps, to give them a start that shall be in no way inferior to the educational advantages and training of English and French naval architects. We have our navy-yards and a few private shipbuilding yards, in which the young men who are to fill our places may acquire the manual dexterity and practical experience of shipbuilding—advantages in which those who have filled positions in the corps in the past have never been deficient. It matters not how high the theoretical and scientific acquirements of a man may be in England and France, or whether he has passed through the School of Naval Architecture or the Ecole Polytechnique; unless he started as an apprentice in the dock-yards, passed through the prescribed course, and graduated at one of the schools above named, he can never reach the position of naval constructor.

There is a tendency among the officers of the service to underestimate the value of the kind of training for naval architects which I am here advocating. They think it enough that he should have passed through the Naval School and have been graduated high in his class, to entitle him to be appointed to the position of assistant constructor. No person should be appointed an assistant naval constructor until he has been examined by a thoroughly competent board of professional officers and has proven that he has an intimate knowledge of the properties of all the materials that enter into the construction of a vessel of war, either of wood, iron, or steel; of their relations to one another when brought into combination; of the best modes of preparing them for their destined purpose; and of the details of actual construction. He should be a good draftsman, able to make every necessary drawing and calculation connected with the designing of naval vessels.

Chief Constructor W. H. White, of the English navy, in his valuable paper "On the course of study in the Royal Naval College, Greenwich," published in the 18th volume of the Transactions of the Institution of Naval Architects for 1877, says:

"It will be observed that no professional subjects are included in the lists of subjects for examination, but it is very probable that the omission will not be continued. Experience has shown the desirability of, if not necessity for, some amount of previous knowledge of shipbuilding, in order that the subsequent studies may be successfully prosecuted. At least an elementary knowledge of shipbuilding, ship drawing and laying off should be acquired by students before entry; and a year or two might be well spent in our ship-yards before joining. Nor should the previous mathematical education of students stop short at the subjects named above, if the full advantages of the college course are to be realized. Many years' experience as student and teacher in the Kensington school and at Greenwich has convinced me that there is

e work to be done by every successful student, however well prepared he may been before entry into the naval architecture classes. The better his prepara- the further will he advance in the study of the subjects for which this depart- of the college specially exists. I am not acquainted with a single instance in h the want of previous training, and especially of mathematical training, has compensated for by the most assiduous efforts, after a student has joined; and ications of the college are so brief that if a student does not acquire a good ledge of practical shipbuilding before he enters, he will certainly have to wait his course of study there is finished before he can thoroughly supply the defi- y. Neither practical nor mathematical knowledge can be left to be acquired en- at the college without grave disadvantages being incurred.

the admiralty students have the great advantage of spending five or six years lock-yard before joining the college; they consequently have opportunities of ning skilled workmen and fair draftsmen, besides acquiring familiarity with uilding and fitting of ships. Concurrently with this they receive a mathemati- raining which is much in advance of that required to pass the entrance examina- above described, and on entry the average admiralty student possesses a knowl- of the differential and integral calculus with their applications to mechanics, This previous training is never found to be too extended, but it is a great gain subsequent work. The cases wherein private students have successfully com- with admiralty students have been very few, and their failure has resulted from lisadvantages of their preliminary training; not from want of ability or applica- "

he views of the Bureau as to the best method of educating our future al constructors are embodied in its letter to the Department, under of May 16, 1882, as follows:

The naval constructors in the English navy have for years been supplied from a l body of students who begin their careers as shipwright apprentices, three of n are admitted each year to a course of three years at the Royal Naval College, nwich, England. This course is the highest pursued at the college, and is of the first importance to the naval service. These students are obtained by a very le and admirable method adopted by the admiralty for the appointment and train- f shipwright apprentices in the dock-yards. From among those who have served years are selected, by competitive examination, the three who are to have the e of study at the Royal College. On passing the examination at the end of the years' course, they are appointed assistants to foremen at the dock-yards, and to positions as assistant draftsmen, draftsmen, assistant constructors, construct- and chief constructors; the highest position being that of director of naval con- tion.

e best way for our Government to educate our future naval constructors is to nence by appointing to the position of shipwright apprentice young men who a first-class common-school education, and who, after three or four years of prac- training in our navy-yards, could be examined competitively, and three selected ally to be sent to the Naval Academy for further study in the higher branches thematics, mechanics, and the French language; after being graduated from there should be sent abroad and entered at the Royal Naval College, Greenwich, for a course in naval architecture.

this means, and no other, can we expect to educate the naval constructor of the e that he may be able to keep pace with and participate in the great strides now ing in the science and art of naval construction."

uring the present year the number of naval constructors has been ced by the death of one, namely, Edward Hartt, and by an inspec- of the following list it will be seen that a few years will, by age e, remove a number of others:

NAVAL CONSTRUCTORS.

ge W. Much will be retired	June 22, 1887.
ge R. Boush will be retired	October —, 1888.
iel H. Pook will be retired	January 17, 1889.
iam L. Mintonye will be retired	December 4, 1891.
rt W. Steele will be retired	April 13, 1893.
nas E. Webb will be retired	May 29, 1894.
k L. Fernald will be retired	November 11, 1897.
am H. Varney will be retired	April 19, 1900.
p Hichborn will be retired	March 4, 1901.
dore D. Wilson will be retired	May 11, 1902.

ASSISTANT NAVAL CONSTRUCTORS.

George F. Mallett will be retired	October 23, 1894.
John F. Hanscom will be retired	May 21, 1904.
John B. Hoover will be retired	June 23, 1898.
Joseph Feaster will be retired	August 5, 1899.
Richard Gatewood will be retired	September 25, 1921.
Francis T. Bowles will be retired	October 7, 1920.
John L. Shock will be retired	March 3, 1922.
Joseph H. Linnard will be retired	September 27, 1922.
Joseph J. Woodward will be retired	October 2, 1922.

There are four assistant constructors at the head of the list, who are thoroughly capable, and have often been called upon to assume control of the construction departments of our navy-yards in the absence of the naval constructors. The next two, while undoubtedly they are men of good theoretical attainments, the only practical knowledge they possess is what they obtained in private dock-yards in England, while attending the course of study at the Royal Naval College, Greenwich, and until they have had more experience in some one of our own navy-yards, under a practical constructor, in handling large gangs of men and directing their work, they could not be intrusted with the management of so important a branch of the naval service as the construction department of a navy-yard, involving, as it does, the proper disbursement of very large sums of money. Practical knowledge and experience of this kind cannot be bought; they come with years of toil and work.

The last three assistant constructors on the list were recently appointed from the corps of cadet midshipmen, and they are without either theoretical or practical knowledge of the subject of naval architecture and shipbuilding, and will be under tuition, at home and abroad, for several years before they can be of any benefit to the Government. It is desirable, if not essential, that a few men should be appointed from civil life possessing the theoretical and practical mechanical qualifications to enter at once upon the duties of assistant naval constructors in our navy-yards, and I therefore recommend that an examination be held of such candidates as the Bureau has already recommended in its letter to the Department, under date of September 27, 1883, and that two or three of those who prove best qualified be appointed at once. The necessity for detailing assistant naval constructors to superintend the building of the new steel cruisers leaves no assistant for duty at any navy-yard except New York and California, while there should be one at Portsmouth, Boston, and Norfolk, to assist the constructor, and in his absence to assume his duties.

Experience has demonstrated the importance of limiting the numbers of the corps, and I would suggest that the number be limited to eleven naval constructors and eleven assistant naval constructors.

By section 1477 of the Revised Statutes, assistant naval constructors have the relative rank of lieutenant and lieutenant of the junior grade; yet they hold an appointment from the Department only. In justice to these officers, I have to recommend that they be commissioned, and by that means relieved from the uncertainty of tenure by which they now hold office. This anomaly, of an officer having relative rank, wearing the uniform, and being without a commission, does not exist in any other corps in the naval service.

I have the honor to be, very respectfully, your obedient servant,

T. D. WILSON,
Chief of Bureau.

Hon. WM. E. CHANDLER,
Secretary of the Navy.

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REPORT OF THE CHIEF OF THE BUREAU OF STEAM ENGINEERING.

NAVY DEPARTMENT,
BUREAU OF STEAM ENGINEERING,
Washington, October 30, 1883.

SIR: In obedience to your order of October 13, I have the honor to submit to the Department the annual report of this Bureau for the past year, together with the estimates for the fiscal year 1884–'85, and the estimates for the completion of the steel cruisers:

APPROPRIATION, STEAM MACHINERY, 1883.

Amount appropriated for fiscal year 1882–'83, act approved August 5, 1882		$1,600,000 00
Reserved for launching monitors, &c., same act		400,000 00
Balance		1,200,000 00
Expended:		
For labor in navy-yards and stations, in constructing new engines, boilers, and their dependencies; repairing old boilers, machinery, &c., and fitting vessels for sea service; preservation of tools; handling and preservation of materials and stores	$619,207 68	
For purchase of materials, stores, machine-tools, freights, and incidental expenses	488,534 30	
For payments on foreign stations for repairs, materials, &c.	38,128 51	
		1,145,870 49
Less repayments by transfers in adjustment of appropriations		3,785 10
Total expenditure		1,142,085 39
Balance on hand		57,914 61

This balance of $57,914.61, however, is covered by obligations of the Bureau for purchases, &c., at home and abroad, the vouchers for which have not yet been received or the accounts not yet settled.

APPROPRIATION, DOUBLE-TURRETED MONITORS.

(Reserved from appropriation steam machinery, as above.) For preparing monitors for launching, &c		$400,000 00
Expended:		
By Bureau of Steam Engineering	$57,841 54	
By Bureau of Construction and Repair	94,902 00	
		150,743 54
Balance on hand		249,256 46

This balance will be required for expenditure under Bureau of Construction and Repair for building and fitting the turrets and pilot-house of the Miantonomoh, as provided in above act, and for work on said monitors now being done under that Bureau.

APPROPRIATION, MACHINERY, DOUBLE-TURRETED MONITORS.

Appropriated act approved March 3, 1883	$1,000,000 00
Expended on monitor machinery	136,737 51
Balance on hand	863,262 49

This balance will be required to pay for the completion of engines, &c., for monitors Puritan, Terror, and Amphitrite, now under contract, and for Monadnock, yet to be contracted for.

DEFICIENCY APPROPRIATION, ACT APPROVED JUNE 14, 1878.

Since the last annual report of this Bureau there has been paid from this appropriation—

To William Cramp & Sons	$14,000 00

There yet remains to be paid from said appropriation, for work now being completed, the following sums, viz:

To Harlan and Hollingsworth Company	$12,881 68
To William Cramp & Sons	8,850 00
Total	21,731 68

GENERAL OPERATIONS OF THE BUREAU.

The following table will exhibit the character and cost, for labor and materials, of the work done under cognizance of this Bureau for the fiscal year ending June 30, 1883, upon the machinery, boilers, &c., with outfits, stores, &c., of naval vessels, and the expenditures for maintenance, &c., at the several navy-yards and stations:

Name of vessel.	Rate.	Engines, boilers, and machinery.	Stores and outfits.	Total.	Remarks.
Alaska	2d	$1,283 77	$727 80	$2,011 57	Slight repairs made.
Adams	3d	7,301 91	2,473 66	9,775 57	In service; new boilers being made.
Alliance	3d	23,737 02	3,226 51	26,963 53	In service; slight repairs made; new boilers being built.
Ashuelot	3d		1,630 59	1,630 59	Lost February 18, 1883.
Alert	3d	38,294 37		38,294 37	Thoroughly repaired, and new boilers put in.
Alarm	Torpedo ram	11,045 10	16 44	11,061 54	Steering propeller repaired.
Ajax	Iron-clad		395 76	395 76	Preserving machinery.
Amphitrite	Iron-clad	6,504 50		6,504 50	Preparing machinery for launching.
Brooklyn	2d		1,378 16	1,378 16	In service; stores.
Colorado	1st	188 46	135 20	323 66	Receiving-ship; preserving machinery.
Congress	2d	373 49		373 49	Preserving machinery.
Canandaigua	2d	13 50		13 50	Do.
Canonicus	Iron-clad	379 18	1,023 11	1,402 29	Do.
Catalpa	Tug	1,274 46	217 48	1,491 94	In service; slight repairs made.
Cohasset	Tug	408 21	154 49	562 70	Do.
Despatch	4th	6,612 81	944 57	7,557 38	In service; sundry repairs made.
Dictator	Iron-clad	827 69		827 69	Preserving machinery.
Essex	3d	3,014 18	1,403 61	4,417 79	New crank shaft and slight repairs made.
Enterprise	3d	1,525 10	1,232 59	2,757 69	In service; sundry repairs made.
Emerald	Tug	1,059 34		1,059 34	Sundry repairs.
Franklin	1st	804 19	3,550 01	4,354 20	Receiving-ship; preserving machinery.
Frolic	4th	52 27		52 27	Preserving machinery.
Fortune	Tug	29,384 20	321 83	29,706 03	New boilers on hand and sundry repairs.
Guard	4th	42 52		42 52	Slight repairs.
Galena	3d	5,649 31	946 20	6,595 51	In service; new tubes put in, and slight repairs made.
Hartford	2d	2,388 83	11,853 59	14,242 42	In service; slight repairs made, with stores and outfits.
Iroquois	3d	600 54	965 19	1,565 73	In service; slight repairs made.
Intrepid	Torpedo ram	46 02	18 41	64 43	Preserving machinery.
Iowa	1st	273 40		273 40	Do.
Juniata	3d	33,656 92	7,705 72	41,362 64	New boilers put in, with thorough repairs; in service.
Jason	Iron-clad	699 86		699 86	Preserving machinery.
Javelin	Launch		125 00	125 00	Stores; preserving machinery.

Name of vessel.	Rate.	Engines, boilers, and machinery.	Stores and outfits.	Total.	Remarks.
Jean Sands	Tug	$50 08		$50 08	Preserving machinery.
Kearsarge	3d	6,286 24	$3,439 15	9,725 39	In service; sundry repairs made.
Kansas	3d	324 94		324 94	Preserving machinery.
Lancaster	2d	2,002 69	2,034 86	4,037 55	In service; sundry repairs made.
Lackawanna	2d		1,279 88	1,279 88	In service; stores.
Leyden	Tug	3,744 23	148 05	3,892 28	In service; sundry repairs made.
Marion	3d	5,905 81	1,320 41	7,226 29	New boilers being constructed.
Mohican	3d	43,672 67		43,672 67	New engines, &c., being constructed.
Monocacy	3d	1,153 10	1,271 09	2,424 19	In service; slight repairs made.
Michigan	4th	64 69	52 70	117 39	Do.
Minnesota	1st	319 98	978 22	1,298 20	Preserving machinery.
Montauk	Iron-clad	2,441 44	1,659 83	4,101 27	Sundry repairs made.
Miantonomoh	Iron-clad	27,747 34	4,523 62	32,270 96	Alterations in machinery, and preparing same for sea service.
Mayflower	Tug	2,418 58	238 09	2,656 67	New tubes put in; slight repairs made.
Monterey	Tug	5,340 88		5,340 88	In service; sundry repairs made.
Nipsic	3d	15,237 13	5,825 56	21,062 69	Thoroughly repaired, &c.
New York	1st	25,971 16		25,971 16	New boilers being constructed.
New Hampshire	1st	165 48	25 75	191 23	Repairs to launch.
Nahant	Iron-clad		87 89	87 89	Stores; preserving machinery.
Nantucket	Iron-clad	850 10	2,383 20	3,233 30	Repairs made; and preserving machinery.
Nina	Tug	76 90		76 90	In service; slight repairs made.
Omaha	2d	23,750 68		23,750 68	New boilers being put in; and thorough repairs being made.
Ossipee	3d	73,991 96		73,991 96	New boilers put in; with thorough repairs.
Onward	4th		102 99	102 99	Store-ship; stores.
Powhatan	2d	6,769 54	3,274 17	10,043 71	In service; extensive repairs made.
Pensacola	2d		703 90	703 90	In service; stores.
Palos	4th	356 29	378 52	734 81	Do.
Plymouth	2d	5,253 04		5,253 04	Sundry repairs made.
Passaic	Iron-clad	3,064 21	45 49	3,109 70	Slight repairs made; and preserving machinery.
Puritan	Iron-clad	8,622 75		8,622 75	Preparing the machinery for launching.
Phlox	Tug	3,890 59		3,890 59	In service; sundry repairs made.
Pilgrim	Tug	5,756 92	195 48	5,952 40	Do.
Pinta	Tug	22,003 88	7,368 03	29,371 91	New boilers put in; and thorough repairs.
Quinnebaug	3d	14 48	3,350 04	3,364 52	In service; slight repairs made.
Richmond	2d	134 69	1,403 20	1,537 89	Do.
Ranger	3d	3,504 01	3,255 64	6,759 65	In service; sundry repairs made.
Rescue	Tug	12,714 31		12,714 31	New boilers completed; with general repairs.
Rocket	Tug	5,182 05		5,182 05	Extensive repairs.
Shenandoah	2d	24,418 44	247 87	24,666 31	New boiler put in; with thorough repairs.
Swatara	3d	4,514 79	5,902 43	10,417 22	In service; general repairs; stores and outfit.
Shawmut	3d	224 46		224 46	Preserving machinery.
Seaweed	Tug	277 54		277 54	Slight repairs made.
Snowdrop	Tug	567 89	282 01	849 90	In service; slight repairs made.
Speedwell	Tug	5,491 47	50 02	5,541 49	In service; general repairs made.
Standish	Tug	3,408 62	363 95	3,772 57	In service; new tubes put in; slight repairs made.
Tennessee	1st	5,089 35	9,787 01	14,876 36	In service; extensive repairs made.
Trenton	2d	74,374 81		74,374 81	In service; and thorough repairs made.
Tallapoosa	4th	6,295 92	2,958 17	9,254 09	In service; general repairs made.
Terror	Iron-clad	6,504 50		6,504 50	Preparing the machinery for launching.
Triana	**Tug**	**1,497 57**	**181 40**	**1,678 97**	**In service; slight repairs made.**
Vermont	**2d**	**211 24**		**211 24**	**Steam heaters.**
Vandalia	**2d**	**10,046 87**	**2,956 50**	**13,003 37**	**In service; new boilers being constructed.**
Wachusett	**3d**	**8,855 25**	**1,928 55**	**5,783 80**	**In service; general repairs made.**
Wyoming	**3d**		**18 58**	**18 58**	**Stores.**
Wabash	**1st**	**1,416 34**	**615 34**	**2,031 68**	**Receiving-ship; slight repairs made.**
Worcester	**2d**	**148 56**		**148 56**	**Preserving machinery.**
Wyandotte	**Iron-clad**	**84 72**	**241 50**	**326 22**	**Do.**
Yantic	**3d**	**711 18**	**2,458 94**	**3,170 12**	**In service; slight repairs made.**
Total		**645,363 51**	**113,784 02**	**759,147 53**	

Expenditures at navy-yards and stations not included in the amount expended on naval vessels.

Navy-yards.	Yard expenses.	Miscellaneous.	Total.
Portsmouth, N. H	$36,382 42	$7,010 39	$43,392 81
Boston, Mass	43,101 36		43,101 36
Brooklyn, N. Y	48,009 03	40,624 70	88,633 73
League Island, Pa	30,087 40	12,536 11	42,623 51
Washington, D. C	25,042 51	36,279 10	61,321 61
Norfolk, Va	107,248 68	2,709 18	109,957 86
Pensacola, Fla	4,933 86	340 88	5,274 74
Mare Island, Cal	67,904 82	2,468 49	70,373 31
New London, Conn	1,499 38		1,499 38
Key West, Fla	2,200 20		2,200 20
Total	366,409 66	101,368 85	467,778 51

NAVY-YARDS.

This Bureau considers that the suggestions contained in the memorandum of the Navy-Yard Commission, forwarded with the Department's letter of June 23, 1883, are a step in the right direction, towards reducing the large expenditures at the navy-yards, for cost of the maintenance and organization, which does not directly enter into the expenditure for construction or repair of naval vessels, and it has faithfully endeavored to carry out so much as relates to matters under its cognizance, and expects to show a corresponding decrease in its expenditures for said maintenance.

I am of the opinion that the assistant engineer officers who have finished cruises at sea should be utilized to a very much greater extent in our navy-yards, and be ordered, not for clerical services, for which they are not trained especially, but, as far as practicable, to have charge as heads of the several shops for which their profession fits them in the place of the master workman or foreman of such shops, thus dispensing with one very considerable source of expense for yard maintenance, and with but the small increase for their pay as officers on shore-duty rather than on waiting orders. This would not only be a great saving in the cost for organization, but be a practical school for these officers, training them constantly in the line of their profession, in the minuter details of designing, making, and repairing the various parts of machinery, &c., which are used on naval vessels, together with the tools, methods, appliances, &c., for the work.

For obvious reasons, the Bureau would not recommend a general and sweeping change in this direction at once, thereby discharging a large class of skilled and faithful mechanics, but as vacancies occur from time to time that they be filled by these engineer officers.

The Bureau is also of the opinion that there would result a very considerable saving in the expenditures for the making, care, repair, and attendance of the steam generators, and appliances of the several kinds and uses in the navy-yards, if they were all placed under the general charge and control of the engineer officers of the yards, the expenses of each to be paid from the appropriations of the bureaus using the same, as now; thus giving a practical opportunity and possibility to carry out another recommendation of the Navy-Yard Commission, that one general steam-generating establishment be provided in each yard to furnish steam for all motive power and steam-heating purposes, thereby securing "economy of fuel, reduced expense of attendance, and an increase of convenience and efficiency."

The various shops under cognizance of this Bureau at the several navy-yards, with their present equipments and appliances, are in good working order, and equal to any present requirement for repair of engines, boilers, &c., or for the rapid and economical construction of new modern machinery of first-class design and workmanship.

The boiler-shops at New York, Washington, Norfolk, and Mare Island yards have been greatly improved by the addition of a few modern machine tools, and are now producing first-class boilers from very large and heavy steel plates, at a less cost per pound than has ever before been done in our navy-yards, or obtainable under contract.

The large machine for testing the strength of boiler material, &c., for which $6,000 was appropriated August 5, 1882, was erected in the Washington navy-yard last March, by the Messrs. Fairbanks & Co., and gives complete satisfaction, supplying a long-felt need for the more careful and correct comparative tests of such metals, according to fixed standards, upon a reliable machine.

I beg to respectfully urge that the amounts called for in the estimates for civil establishment herewith submitted may be allowed for each navy-yard which it is decided to keep open, as with the present amount but one clerk can be paid from this appropriation, which is obviously too small a force for all the records, accounts, reports, &c., required of each, and does not provide for the contingencies of absence from sickness or other cause.

* * * * * * *

STEEL PLATE FOR STEAM BOILERS.

It is proper in this connection, and in view of the fact that as a large proportion of the cost for repairs, under cognizance of this Bureau, of naval steamers is upon their boilers, to call attention to the manifestly good results already obtained by the use of mild steel instead of iron in boiler construction, and the promise that even better results will be seen by the longer use of boilers made from this material.

Previous to 1879–'80 boilers constructed of iron for the Navy by outside parties and in the navy-yards cost from 27 to 40 cents per pound, including grate bars and other cheap fittings, and, although made from the best iron procurable, would ordinarily require extensive repairs after a full cruise of three years, and very extensive repairs, or entirely new boilers after two such cruises.

With the mild steel now used by the Bureau in the boilers constructed in our navy-yards for naval vessels during the last four years we are making such boilers at an average cost of 20.68 cents per pound (the lowest figures being 17.01 cents, and the highest 23.23 cents per pound), and it is expected that this cost will be further reduced by the use of the improved appliances for handling and working this material which have been put up in several of the navy-yards.

Thus far the Bureau has not had to make repairs of any extent upon boilers made of this material, but sufficient time has not yet elapsed to give them full trial to develop what the ordinary lifetime of such boilers will be.

The Nipsic, however, was the first vessel fitted with these steel boilers, and after returning from a cruise of over three years, during which time she steamed some 40,000 knots, her boilers giving most perfect satisfaction in their working, with not $1 of expense in repairs for the cruise, and after being cleaned and some slight repairs made, were ready, and are now again in service, in first-class condition.

The Bureau considers that the stand which it took, insisting upon a tensile strength not to exceed 60,000 pounds to the square inch, with a ductility in 8 inches of not less than 25 per centum, together with its efforts to reduce to a minimum the possible number of riveted joints, for leaks, corrosion, &c., by demanding and obtaining the largest sheets that could be manufactured, has tended largely to raise the standards of excellence of material and the size of plates as now made by the principal manufacturers of the country, and that the stimulus thus given, with the honorable rivalry and zeal of our principal manufacturers using the superior products of American mines, will yet produce a still better material in maximum sizes of plates and at minimum cost.

DOUBLE-TURRETED MONITORS.

Miantonomoh.—Was fitted at League Island navy-yard, and made a successful run from said yard to the Washington yard, where some defects to her air-pump were remedied, since which time she has made a successful trip to New York yard, where she now is.

During these trips she was loaded in such manner as to bring her down to about the depth and trim that she would necessarily have under the conditions of being regularly equipped for actual service. While coming up the Potomac River, on the run from League Island to Washington, and during some trials over measured distances to determine the slip of her propellers, this vessel made 10.5 knots per hour, with six boilers in use, and it was the opinion of her chief engineer, coincided in by her commander, that with properly-drilled firemen, &c., the vessel could be made to run 11 knots per hour. During these trials there was obtained 1426.5600 Ind. horse-power, with 65 revolutions, 63 pounds steam, and a speed of 10 knots.

The results of the performances of this vessel prove the wisdom of completing the machinery of these monitors on the original plans of the Bureau, as heretofore recommended and urged in the several reports and letters of the Bureau.

Puritan.—This vessel has been successfully launched, and according to agreement with the Department, dated December 29, 1882, this Bureau has paid John Roach the sum of $8,622.75 for preparing said vessel, in matters pertaining to this Bureau, for launching. A contract was entered into with Mr. Roach for the completion of engines, &c., with certain hull fittings, based upon careful and thorough estimates of the Naval Advisory Board, for the sum of $410,209.99, and the work is being rapidly progressed with.

Terror.—This vessel has been successfully launched, and according to agreement with the Department dated December 30, 1882, this Bureau has paid William Cramp & Sons the sum of $6,504.50 for preparing said vessel, in matters pertaining to this Bureau, for launching. A contract was entered into with Messrs. Cramp & Sons for the completion of engines, &c., with certain hull fittings, based upon careful and thorough estimates of the Naval Advisory Board, for the sum of $208,712.32, and the work is progressing satisfactorily.

Amphitrite.—This vessel has been successfully launched, and according to agreement with the Department dated December 26, 1882, this Bureau has paid the Messrs. Harlan & Hollingsworth Company the sum of $6,504.50 for preparing said vessel, in matters pertaining to this Bureau, for launching. A contract was entered into with this company for the completion of engines, &c., with certain hull fittings, based upon

areful and thorough estimates of the Naval Advisory Board, for the um of $208,712.32, and the work is progressing satisfactorily.

Monadnock.—This vessel has been successfully launched, and accordng to agreement with the Department dated February 24, 1883, this Bureau has paid Phineas Burgess the sum of $36,709.79 for preparing aid vessel, in matters pertaining to this Bureau, for launching. The oilers for this vessel are on hand at the Mare Island navy-yard.

To complete the engines, &c., with certain hull fittings in all respects imilar to the before-mentioned monitors, ready for sea-service, it will equire, according to the Naval Advisory Board estimates, the further xpenditure of $216,006.82.

NEW STEEL CRUISERS.

Chicago.—4,500-ton cruiser.
Boston.—3,000-ton cruiser.
Atlanta.—3,000-ton cruiser.
Dolphin.—Dispatch boat.

The plans prepared by this Bureau for machinery for the Boston and Atlanta, and those as modified by the Bureau for the Chicago, together with those for the Dolphin, with the specifications for the same prepared by the Bureau, were all approved by the Naval Advisory Board, and said machinery, together with the hulls, are in progress of construction by John Roach, of New York, on contracts with the Department, and under the inspection and supervision of the Naval Advisory Board.

As one of the above cruisers (Chicago) is designed to take the place of vessels of the Trenton class, which is one of the best types of vessels recently built for the United States Navy, it is believed to be of nterest and value for purposes of future reference and comparison to ive at this time full and complete data of the performances of this essel, which is done in the accompanying report.

PERSONNEL OF THE ENGINEER CORPS.

In this connection I trust that I may be pardoned for quoting at ength what was so well and ably said upon this subject, in the last nnual report of this Bureau, by the then engineer in chief, William H. Shock, U. S. N., who was retired for age, by law, from the active list of he Navy, and as chief of this Bureau, on the 15th of June last.

I feel that his views and opinions derived from his long and wide ractical experience, extending over the forty years of his active servce as an engineer officer of the Navy, some six years of which were pent as head of this Bureau, together with his well-known integrity, andor, zeal, and wide-awake progressiveness in all matters pertaining o his profession and his corps, should command the most careful attenion and thoughtful consideration from every one who may be called pon to pass judgment upon the subject, and this shall be my excuse or quoting so largely from the last annual report made by this officer, s follows:

In this connection I beg most respectfully to call attention to some of the provisions f the act making appropriations for the naval service approved August 5, 1882, and o place upon record my earnest objections thereto, particularly with reference to so uch of the act as makes the sweeping reduction of 50 per cent. of the working force f the Engineer Corps.

Of the 163 passed and assistant engineers on the list January 1, 1882, 96 were at ea. This number, in my judgment, is not too many to insure the safety and main-

tain the efficiency of the steam machinery of the Navy now afloat. The act allows only 60 passed and 40 assistant engineers.

With this reduced number, and with the same number of United States naval steamers in commission as at present, there would be an average of a little less than three watch engineers to each ship in commission; but as reliefs have to be provided for those at sea, and allowance made for sickness, &c., the Department could not assign more than one passed or one assistant engineer to each ship at sea.

There is not, to my knowledge, a single ocean steamer in the merchant marine today that is allowed only one assistant engineer, and when this reduction is fully made as contemplated by said act, its result can only be a great want of efficiency, the imperilment of lives and public property, and a very largely increased expenditure for repairs to boilers and machinery.

Some provision must be made for the care and management of the steam machinery of the Navy, as it is physically impossible to keep officers of the Engineer Corps at sea continuously, and equally impossible for one assistant to perform all the duties required of an engineer in the engineer department of a war steamer.

The only recourse must necessarily be the employment of mechanics or machinists, so called. Such a system, after a trial of eleven years in our Navy, had to be abandoned, for the reason that competent respected mechanics could not be found, and with such as were obtained the record shows that the repairs required to machinery were numerous and extensive, often involving the expenditure of large sums of money. Every inducement was held out to secure and retain good men; their pay was increased from $55 a month to $61.50, then to $76.50, the latter but little less than the pay of the educated cadet engineer; but all to no purpose, for none, with a few rare exceptions, except the idle or the intemperate, would enlist, and in the case of the exceptions noted many availed themselves of the first opportunity and obtained their discharge.

It must also be borne in mind in considering the machinist system that the United States has no large merchant steam marine like Great Britain from which to draw a supply of machinists thoroughly trained in the duties of the engine-room. It has been asserted that the engineer department of the British navy is managed upon this principle. This is not strictly true; but granting it for the present, it must be remembered that the social system prevailing in Great Britain is vastly different from that in the United States. In the former country the laborer, the mechanic, the artist, and the merchant are educated from childhood in the belief that those in official positions in the army and navy and nobility are of gentle blood, a higher race of beings than themselves, occupying a plane whose level they never can attain. Not so in the United States. Here every boy is taught that he is a possible President, and the intelligent, educated American mechanic is not less ambitious than his fellow-men in other walks of life in his efforts to elevate himself and family in rank or standing among them.

Whenever Congress says to the laboring and mechanical classes of this country that, whatever your merits may be, you cannot, shall not, rise above the social scale in which you were born, and this declaration is acquiesced in by the public, then, and not till then, will the Navy be able to obtain such a class of skilled mechanics by enlistment as is easily to be had in England and other monarchial countries.

As is stated above, the machinist system does not prevail in the British service to the extent that this act will render necessary in our naval service, as will be seen from the fact that in June, 1881, there were one hundred and thirty-six engineers on the list, which gives a little more than six engineers to each ship in active service, or about double the number that said act will allow to each ship in active service in our Navy.

I respectfully submit that, while it is contemplated to complete one or more of the monitor vessels, requiring from five to seven engineers to each, as well as to build new steamers, any reduction in the number of engineer officers will be detrimental to the best interests of the Government.

I therefore respectfully recommend that Congress may be asked to so far modify the act approved August 5, 1882, in relation to the number of assistant engineers on the active list, as to allow the number provided for under act approved March 3, 1871, that is, one hundred passed assistant engineers and one hundred assistant engineers, with the relative rank for each as now fixed by law.

The difficulty of securing engineer officers for each ship in service has already made itself very seriously felt. With the number of assistant engineers fixed by the act approved August 5, 1882, it is impossible to properly officer our ships in the engineering department.

To intrust the watches to the young naval cadets, except they may have had thorough and special training therefor, or to the present finish-

rs, is but to invite disaster; and the occurrence of some great calamity an only be a question of time.

Were our merchant steamers to leave port similarly officered the underwriters would refuse to insure, and the owners would be liable to iminal prosecution.

If the lives of the officers and men of our Navy are of little consequence, if the care of the machinery of our vessels of war is of small importnce, then such a system needs no criticism.

Steps should be at once taken to provide adequate professional supervision for our steam machinery, for the proper protection and preservaon of lives and property, or the consequence of neglect must be accepted.

In conclusion, it may be remarked that our Government was the first discover the advantages of special technical education for its naval ngineer officers, and the establishment of the cadet-engineer system at nnapolis was the sequence.

Conservative England, with its existence depending upon the efficiency f its navy, speedily followed, and its training-school for naval engineers as been fostered and encouraged by all possible means.

Thus, while other Governments, alive to the necessity of maintaining naval supremacy, establish and cherish special technical schools for he training of its engineer officers, the Navy of the United States, after horoughly preparing and equipping its naval academy with all the aried appliances for the instruction and training of young men for this o important special service, with its high grade of requirements for ntering, and standard required for graduation, presents the extraordiary spectacle of retrograding to a system, or lack of system, of twenty ears ago; a measure that excites the surprise and unfavorable criticism of the progressive educators of the country; and one which, even it may tend to make the service more homogeneous, will certainly esult in also making it inefficient.

A parallel might be supposed if our large universities were to abolish heir special scientific and medical schools, and, without adding anything o their curriculum, except perhaps a little rudimentary mechanics and hysiology, confer degrees in arts, medicine, and science.

Further, I respectfully invite attention to the last annual report of he Bureau upon this subject.

ESTIMATE OF APPROPRIATIONS.

I have the honor to submit herewith the annual estimates of this Bureau for the fiscal year ending June 30, 1885.

Very respectfully,

W. H. H. SMITH,
Acting Chief of Bureau.

Hon. WILLIAM E. CHANDLER,
Secretary of the Navy.

REPORT OF THE CHIEF OF THE BUREAU OF PROVISIONS AND CLOTHING.

NAVY DEPARTMENT,
BUREAU OF PROVISIONS AND CLOTHING,
Washington, D. C., October 29, 1883.

SIR: I have the honor to submit a report of the transactions of this Bureau for the fiscal year ending June 30, 1883.

PROVISIONS.

Amount appropriated for the year	$1,000,249 33
Amount received from settlement of accounts in the Fourth Auditor's Office	709 31
Total amount received under provisions	1,000,958 64
Amount transferred from the appropriation provisions to general account of advances, on account of expenditures by pay officers abroad, during the year	726,727 99
Amount transferred in the settlement of accounts in the Fourth Auditor's Office	312 01
Amount expended by the Bureau, as per requisitions	273,918 64
Total amount expended under provisions	1,000,958 64
Amount expended by pay officers abroad:	
For commuted rations to officers	98,042 22
For commuted rations to crew	420,389 16
For commuted rations to marines	45,003 00
For surrendered rations to crew and marines	53,546 07
For provisions purchased	242,399 73
For freight on provisions, labor and expenses of storehouses	5,479 84
	864,860 02
Amount expended by the Bureau:	
For commuted rations to officers	25,568 70
For commuted rations to crew	1,148 10
For provisions purchased	161,001 95
For freight on provisions, labor and expenses of inspections	86,199 89
	273,918 64
Amount of commuted rations paid to crews on board ships, at 30 cents	420,389 16
Cost of rations issued to crews on board ships, at 30.15 cents	413,371 40
Amount of commuted rations paid to marines on board ships, at 30 cents	45,003 00
Cost of rations issued to marines on board ships, at 30.15 cents	60,104 68
Amount of commuted rations stopped on account of sick in hospital, and credited to the hospital fund	13,042 78
Amount of provisions issued to officers' messes	7,758 50
Amount expended by pay officers abroad, and paid for from general account of advances, during the fiscal year 1883	864,860 02
Amount transferred, up to this date, from the appropriation provisions to general account of advances, on account of expenditures abroad, during the fiscal year 1883	726,727 99
Amount due general account of advances, at this date, on account of the fiscal year 1883	138,132 03
Amount of commuted rations stopped on account of sick in hospital, and credited to the hospital fund	13,042 78
Amount due on contracts	30,570 52
Total debits under provisions	181,745 33
Deduct amount due for provisions issued to officer's messes	7,758 50
Deficiency under provisions	173,986 83

CLOTHING FUND.

Balance on hand July 1, 1882	$387,696 67
Amount transferred from general account of advances to the clothing fund, on account of issues on board ships, during the fiscal year 1882–1883	169,181 46
Amount received from settlement of accounts in Fourth Auditor's Office	315 89
Amount received from sales of clothing	3,132 44
Total amount received under clothing	560,326 46
Amount transferred from the clothing fund to general account of advances, on account of purchases by pay officers abroad, during the fiscal year 1882–1883	8,105 69
Amount expended by Bureau, as per requisition	207,634 87
Total amount expended	215,740 56
Balance on hand July 1, 1883	344,585 90
Cost of clothing purchased by pay officers abroad, and paid for from general account of advances, during the fiscal year 1883	4,951 71
Amount transferred up to this date, from the clothing fund to general account of advances, on account of purchases abroad, during the fiscal year 1883	3,455 17
Amount due general account of advances, at this date, on account of the fiscal year 1883	1,496 54
Cost of clothing issued on board ships, during the fiscal year 1883	229,584 73
Amount transferred up to this date from general account of advances to the clothing fund, on account of issues on board ships, during the fiscal year 1883	181,577 22
Amount due the clothing fund, at this date, on account of the year 1883	48,007 51
Deduct amount due general account of advances, as stated above	1,496 54
Balance due the clothing fund at this date on account of 1883	46,510 97

SMALL-STORE FUND.

Balance on hand, July 1, 1882	99,685 92
Amount transferred from general account of advances to the small-store fund, on account of issues on board ships, during the fiscal years 1882 and 1883	49,766 66
Amount received from settlement of accounts in the Fourth Auditor's Office	39 84
Amount received from sales of small stores	114 04
Total receipts under small-stores	149,606 46
Amount transferred from the small-store fund to general account of advances, on account of purchases by pay officers abroad, during the fiscal years 1882 and 1883	3,477 99
Amount expended by Bureau, as per reqnisitions	19,078 53
Total amount expended	22,556 52
Balance on hand July 1, 1883	127,049 94
Cost of small stores purchased by pay officers abroad, and paid for from general account of advances, during the fiscal year 1883	5,348 17
Amount transferred, up to this date, from the small-store fund to general account of advances, on account of purchases abroad, during the fiscal year 1883	1,988 33
Amount due general account of advances on account of 1883, at this date	3,329 84

RHODES HOUSE

Cost of small stores issued on board ships, during the fiscal year 1883..	$74,009 18
Amount transferred, up to this date, from general account of advances to the small-store fund, on account of issues on board ships, during the fiscal year 1883	56,348 73
Amount due small-store fund, at this date, on account of the year 1883.	17,660 45
Deduct amount due general account of advances, as stated above	3,329 84
Balance due small-store fund, at this date, on account of the year 1883	14,330 61

CONTINGENT.

Amount appropriated for the year	50,000 00
Amount received from settlement of accounts in the Fourth Auditor's Office	87 34
Total amount received under contingent	50,087 34
Amount transferred from the appropriation contingent to general account of advances, on account of expenditures by pay officers abroad, during the year 1883	3,490 83
Amount expended by the Bureau, as per requisitions	15,057 66
Total amount expended	18,548 49
Balance on hand at this date	31,538 85

The amount paid for commuted rations ($576,477.06) exceeds one-half the total amount appropriated for provisions. The estimates for provisions include for commuted rations only one-fifth the number of men, boys, and marines, and the officers who are employed on duty entitling them to commutation of rations.

A comparison with previous years shows a rapid increase in payments for commuted rations, thus: Amount paid for commuted rations during the year 1882–'83, $576,477.06; amount paid for commuted rations during the year 1880–'81, $510,791.44; increase $65,685.62. The statute authorizes commutation to (1) officers; (2) midshipmen; (3) the sick. (See sections 1577, 1578, and 1583 Rev. Stat.) The price at which rations shall be commuted is fixed at 30 cents. (Section 1585 Rev. Stats). It does not appear from the terms of the law that Congress contemplated the commutation of the ration to a greater extent than is provided in the above quoted sections, or, at most beyond the estimates of this Bureau. The unlimited commutation now practiced on many vessels of war results in the deterioration and final condemnation of quantities of provisions procured by the Department, in pursuance of law, as a military necessity. The Bureau therefore recommends, as a measure of economy, that the regular commutation of the ration shall be limited by law to one-fifth the number of enlisted men, and to commissioned and warrant officers when attached to sea-going ships.

The system now in practice, which provides for the purchase of provisions from enlisted men by disbursing officers of the Government, is one which involves complication in provision accounts, and occasions much loss of provisions which are furnished at the expense of Government. The provisions are supposed to be drawn as rations from the Government, without cost to the men, and afterwards sold to the Government by the enlisted men who surrender them. Practically these provisions are not drawn, never pass to the possession of the men, and the vouchers on which these provisions are paid for are fictitious.

This system has no foundation in law; like the excessive commutation of rations it results in waste of good provisions provided at Government expense, and presents the additional objection of irregular and

s vouchers, which are condemned by statute law. The Bureau
ends the absolute prohibition of this practice.
cussion of the merits of the above-mentioned practice of excess-
mutation and the sale of provisions to enlisted men is not called
. It is pertinent to remark that the question of providing
variety in the Navy ration has no direct bearing on the recom-
ions of the Bureau.
article in the Navy ration has been introduced upon the advice
etent scientific experts. It cannot be materially changed in
or variety until its value shall be increased by Congress. And
h science may point out other articles of food, valuable for the
ustenance, either of undeveloped boys or mature men, which
embraced in the present ration list, the practical question how
them for preservation in store and on ship-board would remain
d. If additional variety is the desideratum, then the commuta-
one-fifth of the rations would enable the proper disbursing
o expend the amount commuted in providing such additional
of food for immediate consumption as may be deemed most suit-
meet the wants of the crew.
improvement has been made in the clothing for the enlisted
the Navy under the present system of manufacture at the New
vy-yard. Other changes are contemplated by the Bureau, in
tem, with a view of improving the quality and reducing the cost
ing.
everal years past the freight on provisions has been paid from
ropriation provisions, and the freight on all other stores belong-
he Bureau from the appropriation contingent. When provis-
shipped other stores belonging to the Bureau are almost invaria-
ped at the same time; and thus it becomes necessary to prorate
unt of freight between the two appropriations and to make out
of bills. To simplify this, and to obviate the necessity for the
abor, it is recommended that the appropriation be so changed
y all freight from the appropriation contingent, and that that
lation be increased to $60,000 from $40,000, the amount appro-
for the current year. The amount paid for freight during the
r from the appropriation provisions was between $15,000 and

e the honor to submit, also, estimates of appropriations marked
, D, and E for the support of the Bureau for the fiscal year end-
e 30, 1885; together with schedules, numbered from 1 to 4, in-
of proposals received, and statement, numbered 5, of contracts
account of the Bureau during the fiscal year ended June 30,

ery respectfully, your obedient servant,

J. A. SMITH,
Paymaster-General, U. S. Navy.

WM. E. CHANDLER,
Secretary of the Navy.

REPORT OF THE COMMANDANT OF THE MARINE CORPS.

HEADQUARTERS UNITED STATES MARINE CORPS,
COMMANDANT'S OFFICE,
Washington, D. C., October 1, 1883.

SIR: I have the honor to submit my annual report of the condition of the United States Marine Corps.

On October 1, 1883, there were 1,887 enlisted men in the Corps, 883 of whom were on board ships in commission, and 1,004 doing duty at the several shore stations.

During the past year there have been 888 enlistments, 131 re-enlistments, 431 discharges, 16 deaths, and 564 desertions.

I urgently invite attention to my report of last year in reference to an increase of privates, as great inconvenience continues to be felt for want of them. At the navy-yards and on board of vessels in commission there is a demand for more men, which I am unable to supply. The service suffers accordingly. No other action than an increase of appropriation is needed, the number required being already allowed by law. I hope that Congress at this session may consent to give us this increase.

Congress at its last session having authorized the appointment of eight more second lieutenants, with the understanding that the whole number provided for by law should hereafter be appointed, I have, agreeably to your instructions, caused the estimates to be made for 30 second lieutenants as formerly.

An appropriation for barracks and quarters at the Norfolk navy-yard is urgently needed. A large building, in a suitable position, now there, can easily be converted into a commodious barrack building, and quarters for officers can be built upon several vacant spaces in the navy-yard. An estimate for this will be submitted.

The reports of inspections at the different posts and of guards of vessels returning from cruises, made by the adjutant and inspector, show an excellent state of efficiency and discipline, which my own personal inspection at the posts confirms.

The officers are zealous and attentive to duty, and the men (though not enough in number to do all that is required of them) are yet willing and subordinate, and elicit marked praise whenever they appear in public, or are called on in any emergency.

I trust that the regulations drawn up by the recent Naval Board convened for that purpose may be approved, as they are greatly needed to properly define our duties on shore and afloat.

The recent appointment of officers from the Naval Academy is a long desired step in advance, and is one which it is believed will have excellent results for the service at large.

Recruiting has been carried on at Boston, New York, Philadelphia, and Mare Island, California, with moderate success during the past year; in all, 888 privates have been enlisted, of whom many are now rendering efficient service.

The limited number of men available, however, forces the sending to sea of those who have not been a sufficient time enlisted to be well-drilled soldiers. Men ought to be one year in garrison before joining a ship for sea service. Every effort is required to instruct the men in target practice, and with good results.

In consequence of an epidemic of yellow fever at the navy-yard and reservation, Pensacola, Fla., the detachment serving at that yard has been moved into camp some miles distant, after sustaining a loss of five

privates. It is now free from disease, and it is hoped may continue so until frost sets in.

First Lieut. A. S. Taylor, in command of this detachment, deserves much credit for his efficient and officerlike conduct in this emergency.

One captain has been retired and one first lieutenant has resigned. With the consequent promotions, no other changes have taken place in the active list, other than the appointment of the second lieutenants before mentioned.

The annual estimates for the support of the Corps were forwarded to the Navy Department on the 28th of September last.

Very respectfully, your obedient servant,

C. G. McCAWLEY,
Colonel Commandant.

Hon. WM. E. CHANDLER,
Secretary of the Navy, Washington, D. C.

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NAVAL ACADEMY.

REPORT OF THE SUPERINTENDENT.

UNITED STATES NAVAL ACADEMY,
Annapolis, Md., October 24, 1883.

SIR: I have the honor to report that the course of instruction prescribed for the past year has been carried out; that fifty-four cadets completed the four years' course and were detached from the Academy in June last, to perform two years' service afloat, six of them completing the course "with distinction" and eighteen "with credit." Thirty-five of this class entered as cadet-midshipmen and nineteen as cadet-engineers.

Previous to the passage of the law of August 5, 1882, separate courses of instruction were prescribed for cadet-midshipmen and cadet-engineers, but since that date all the cadets of a class have pursued the same course of instruction.

A new course of instruction for naval cadets was adopted by the Academic Board in April last and approved by the Department, but was not put fully into operation until the 1st instant, the beginning of the present academic year.

Under this new system the number of studies pursued during the four years' course is the same as in the course pursued in 1881-'82, except dropping out theoretical naval architecture (which was an elective study), but the studies have been so arranged as to reduce the number to be pursued during any one year.

During the first year (fourth class) the reduction is one study in each term; during the second year (third class) one study in the first term and two studies in the second term; during the third year (second class) five studies in each term; during the fourth year (first class) the number of studies has been increased one in the first term, but reduced four in the second term. It is believed that this change will be beneficial to the cadets. The usual summer practice cruise was made by the cadets in the sailing ships Constellation and Dale, except by that portion of the present second class that entered as cadet-midshipmen.

The ships cruised at sea and in Chesapeake Bay, visiting only the port of Portsmouth, N. H. The cadets of the first class were instructed in the duties of junior officers and petty officers in cruising vessels of war, and those of the junior classes in the duties of seamen. Copies

of the reports of the commanding officers of the practice ships are forwarded herewith, marked A and B.

The cadets retained at the Academy during the summer months were daily instructed in mechanical work in the steam-engineering shops and in running and managing steam launches, and were also instructed in the management of pivot guns.

On the 30th of January last a mutinous demonstration was made by the cadets, upon the publication of an order of the Superintendent depriving a cadet officer of his rank for misconduct. The details of the demonstration and the disciplinary measures adopted were reported to the Department February 20, 1883.

Ten cadets of the third class (seven of whom were dismissed and three otherwise punished) were found guilty in September last, by a court-martial, of hazing cadets of the fourth class on board of the Constellation during the summer cruise.

Necessary repairs have been made to the public buildings as far as practicable during the year. The walls of the house known as the Superintendent's quarters have been rebuilt and roofed in. The armory building has been completed. The roof of the large hospital building on "the farm" has been repaired. The old frame buildings formerly used as the armory and the bakery have been taken down. The bridge across College Creek has been thoroughly repaired. A sea-wall has been built partially around the Naval Cemetery to protect the banks. The drill and parade ground has been filled in, graded, and sodded. The drainage has received much attention, and the sewer under the lower cadet quarters has been removed. The uniform of the cadets, which has heretofore been made by contract, is now all made at the Academy under the direct supervision of the storekeeper. Besides a reduction in price, uniformity in cut, fit, color, and quality is obtained.

Ninety-four candidates for admission presented themselves in May last and one hundred and twenty in September. Of this number one declined appointment, five withdrew, one was refused examination for being of bad moral character, sixty-nine failed to pass the required mental examination, and thirty-three were found physically deficient. The physical defects of ten were waived by the Department. One hundred and fifteen were admitted and appointed naval cadets.

The great advantage gained by the cadets of the fourth class who entered in time to make the summer practice-cruise causes me to renew my recommendation that all candidates for admission to the Academy shall be directed to report for examination on the 15th day of May in each year. It is also recommended that members of Congress shall be notified as soon as vacancies may occur, and of vacancies that will occur, in order that persons may be selected for appointment in time to prepare for the examination.

In this connection it is suggested that it would be beneficial to the Navy and to the cadets if the law of August 5, 1882, should be so modified that the selection of cadets who are to fill vacancies in the lower grades of the line and Engineer Corps of the Navy and of the Marine Corps shall be made upon the completion of the four years' course instead of upon the completion of the six years' course. This change would send to sea in the cruising ships only cadets to be retained in the service, and would give the Navy a more efficient corps of junior officers. Many of the cadets, while performing the two years' service afloat, know that they will not be retained in the Navy, and they naturally feel little or no interest in their duties. I beg leave to again respectfully call your attention to the great disparity in pay of those *final graduates* who after completing their six years' course are assigned

to the lower grades of the line and Engineer Corps of the Navy and of the Marine Corps. When at sea, an ensign (junior grade) receives $1,000 per annum, an assistant engineer $1,700 per annum, and a second lieutenant of marines $1,400 per annum. When on shore duty, an ensign (junior grade) receives $800 per annum, an assistant engineer $1,400 per annum, and a second lieutenant of marines $1,400 per annum.

The first assignments of final graduates under the law of August 5, 1882, was made in June last; seven were assigned as ensigns (junior grade), three as assistant engineers, and ten as second lieutenants in the Marine Corps.

An examination of the Navy Register will show that at the present rate of promotion it will be at least fifteen years before the senior graduate assigned to the line can receive the same rate of pay per annum as was at once received by those members of his class who were assigned to the Engineer Corps and to the Marine Corps.

I am, sir, very respectfully, your obedient servant,

F. M. RAMSAY,
Captain, U. S. N., Superintendent.

Hon. W. E. CHANDLER,
Secretary of the Navy, Washington, D. C.

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REPORT OF BOARD OF VISITORS.

UNITED STATES NAVAL ACADEMY,
Annapolis, Md., June 9, 1883.

SIR: The Board of Visitors selected to attend the annual examinations at the United States Naval Academy submit the following report of their proceedings:

The Board met on Saturday, June 2, and organized by the appointment of Rear-Admiral John C. Howell, United States Navy, as president, and Senator E. G. Lapham, of New York, as vice-president.

The following standing committees were appointed:

Grounds, buildings, and sanitary condition.—Hon. E. G. Lapham, Hon. R. Q. Mills, Hon. A. C. Harmer, Hon. T. Updegraff, and Dr. S. A. Green.

Seamanship, ordnance, and navigation.—Hon. A. G. McCook, Hon. A. C. Harmer, and Rear-Admiral John C. Howell.

Discipline, drill, practical exercises, administration, and police.—Maj. Gen. Irvin McDowell, Hon. R. Q. Mills, and Rev. J. W. Dinsmore.

Steam, mathematics, physics, and mechanics.—Hon. J. N. Camden, Prof. G. I. Riché, and Dr. S. A. Green.

English studies, modern languages, and drawing.—Prof. G. I. Riché, Mr. E. V. Kinsley, and Rev. J. W. Dinsmore.

Finance and library.—Hon. A. G. McCook, Hon. T. Updegraff, and Mr. E. V. Kinsley.

Final report and to select orator to address the cadets on Saturday, June 9.—Hon. E. G. Lapham, General Irvin McDowell, and Dr. S. A. Green.

Standard of scholarship.—Dr. S. A. Green, Mr. E. V. Kinsley, Prof. G. I. Riché, and Rev. J. W. Dinsmore.

The Board met daily for the consideration of subjects before them.

GROUNDS, BUILDINGS, AND SANITARY CONDITION.

The buildings were all examined, and we take pleasure in stating that we found everything has been done during the year which was feasible

to render the premises healthy and comfortable. The condition of the buildings was cleanly and orderly. Trees have been planted, the grounds have been graded and turfed, roads and pavements made, and they have a very attractive appearance.

The Superintendent's quarters, which were in a dilapidated condition, as stated in the report of the Board last year, have been taken down and a new and substantial building of brick erected on the same site, with the walls and slate and tin roofs completed.

A substantial bridge has been built across College Creek on the road leading to the Naval Cemetery, the farm, and the Naval Hospital. Many desirable improvements have been made on that portion of the Government's grounds. The orchards have been trimmed, the underbrush cleared away, the cemetery enlarged, the verandas on the wing walls of the hospital taken down, and the roof repaired so as to protect the building from further decay.

Without giving minute particulars, we may add that in our judgment there has been a judicious, economical, and necessary expenditure in all these repairs and improvements made during the year.

We beg to renew in substance the recommendations made by the Board of Visitors last year:

First. That the new quarters for the Superintendent should be completed at the earliest practicable period.

Second. That quarters for all the cadets should be erected, in a plain building of modern style, on the northeast portion of the grounds now occupied by old and inconvenient buildings, numbered from one to nine, inclusive; so that the cadets shall live under one roof, instead of being widely separated as at present. That a mess-room and kitchen should also be erected in the same section, separate from the cadets' quarters. This change can be made by using much of the material in the old buildings, and without requiring a very large appropriation of money in any one year.

The building at the western end of the grounds, where the larger portion of the cadets are at present quartered, and in which are the kitchen and mess-room, could then be converted into residences or apartments for those of the professors and officers who now reside outside the Academy limits (some ten or twelve in number). This, as well as the separation of the kitchen and mess-room from the cadets' quarters, we deem very important changes.

We also recommend the purchase of so much of the ground as lies between the west wall of the Academy limits and the gas-works of the city of Annapolis, and the extension of the limits to the line of such purchase. This will bring into possession of the Government a part of the city where epidemic diseases are most likely to prevail, and will remove a very unhealthy district from contiguity to the present grounds and afford an almost direct passage by Hanover street to the bridge leading to the cemetery, farm, and Naval Hospital. The tract is about three by four hundred feet in size, and its assessed value about $11,000.

We also recommend that the hospital and outbuildings connected therewith be repaired and put in order to be ready for use as a naval hospital. It is capable of accommodating a very large number of patients, is upon an elevated and healthy site, and was constructed at a large expense to the Government. It should no longer be suffered to run to decay.

STEAMSHIP, ORDNANCE, AND NAVIGATION.

The Board witnessed the practical exercises in steamship and gunnery on board the U. S. S. Wyoming, while under way. The cadets got

up steam, fired, worked the engines, made sail, reefed and furled most creditably, and the exercises at general quarters and target practice were worthy of high praise. More attention has been given to practical navigation than heretofore; and in seamanship the cadets commence at the lowest round of the ladder, and literally dip their hands in the tar-bucket, learn practically to knot and splice both hemp and wire rope, strop blocks, and so to the highest branches of the practical sailor's handicraft.

DISCIPLINE, DRILL, PRACTICAL EXERCISES, ADMINISTRATION, AND POLICE.

Every facility has been given by the authorities in the inquiries made concerning the discipline and administration of the Academy.

In accordance with the request of the Secretary of the Navy, information was sought, not only from the officers of the Academy, but from the cadets as well; and after seeing those who came forward voluntarily in response to an invitation published to the whole corps, several cadets were especially sent for and examined concerning the state of discipline at the Academy and the effect of the various reforms made by the present Superintendent.

One of these reforms was a radical one, affecting the whole system of discipline; and the others were important and bore directly upon it.

The most important one, and one especially distasteful to the cadets at first, was the change made in the manner of placing them in their quarters.

Formerly each class lived by itself. Cadets of the first class had special privileges as a class, and the impression seems to have prevailed that the action of class on class, and especially of the first class on the others, was beneficial to discipline, even more so than that produced by military organization of various grades, acting from the impulse given from the commander.

The change consisted in quartering the cadets by divisions (companies), each composed of all the classes; the cadet officers and cadet petty officers with it on the same floor. The discipline to be maintained, as far as possible, by the same means as are in use in the Navy.

Another reform, and one that bears directly upon discipline, was the abolition of privileges to members of a class as such, and the giving of privileges in each class according to the standing of the cadets therein in conduct and studies.

These changes, and other minor ones concurring, were not made without friction; and the serious change in the future of the great majority of the corps by the recent act of Congress, which provides for only a small portion of each class to be, hereafter, received into the naval service, has tended to disturb the minds of the cadets, and a restless feeling seems to have existed, which prepared them for those exhibitions of temporary insubordination which occurred in the early part of the year.

As to the changes recently made at the Academy, those coming to our notice, and especially the two before mentioned, are, we submit, in the right direction; and when they shall have been maintained long enough to pass through the transition period—which is ever one of some disturbance—the effects will be beneficial to the service.

In no instance have we found any one to complain of the discipline as oppressive, though some have thought it too lax.

The course of the Superintendent seems to us to have been characterized by a sense of justice, and by untiring efforts, in every direction, to promote the interests and improve the character of the Academy.

While bearing witness to the zeal and fidelity of all the authorities connected with the Academy, there are two changes in the maintenance of discipline which, we submit, the interests of the service require:

(1.) By the Regulations of the Naval Academy of January 1, 1876, paragraph 169, cadets were declared liable to be tried by court-martial.

But an opinion was given by the Attorney-General, July 10, 1877, to the effect that, while the cadet at West Point was "liable to court-martial," the cadet at Annapolis was not so liable except for the offense known as "hazing"; and since then no courts, save for this offense, have been instituted for the trial of cadets at the Naval Academy, and punishments for offenses committed have been given by the order of the Superintendent or that of the Secretary of the Navy. To assist him in determining the guilt of an accused, the Superintendent has convened Boards of officers, and has taken his action on, or after, their report. These Boards have neither the power nor character of courts. They keep no record of their investigations, but merely report their findings and opinion.

Section 1624 Revised Statutes says: "The Navy of the United States shall be governed by the following articles" (the Articles of War of the Navy, "providing for courts-martial and courts of inquiry for the trial of military offenses").

The ruling of the Department of Justice to the effect that naval cadets are not subject to these articles, and consequently not in the Navy, will be a surprise to many persons who thought that the naval cadet belongs to and forms part of the Navy, and, equally with the Army cadet, has all the rights and safeguards which the military law provides for the administration of discipline.

The offense of "hazing," which, owing to an act of Congress, is alone, according to the opinion of the Attorney-General, triable by court-martial, while a gross and sometimes a brutal one, is by no means of the same gravity as offenses to be punished by the order of the Superintendent, or that of the Secretary of the Navy.

And if it be necessary—and Congress declares it is—that before condemning a cadet for "hazing" a trial shall be had before a competent court, it is certainly so, we submit, for such acts as not only unfit the accused for honorable life in the Navy, but blast his character as a man and a citizen.

Falsehood, fraud, slander, and obscenity are offenses for which the naval cadet can be, now, dismissed by the Secretary of the Navy without trial.

(2.) The other change is one within the power of the Navy Department to make, if, indeed, in many cases it is not within that of the Superintendent of the Academy.

This change is, that in any question of an alleged offense against the regulations, the cadet shall not be called on to criminate or exculpate himself, but his guilt or innocence shall be determined by others, or by his own voluntary admission; and where an offense is supposed to be committed, it shall not be fastened on any one by calling up all who may be supposed to have committed it, and requiring them to certify on honor they are not guilty, and thus, by elimination, detect those who are so!

We witnessed the exercises of the cadets at infantry and artillery drill, dress parade, gymnastics, in the steam-engine room, and on board ship as seamen and artillerists, and in all found their skill and knowledge entirely satisfactory.

The administration and police is all that can be desired.

We recommend that the act of August, 1882, be amended as a similar act in relation to cadets at West Point has been, so as not to include those cadets who had entered the service before the passage of said act.

ENGLISH STUDIES, MODERN LANGUAGES, DRAWING, STEAM, MATHEMATICS, PHYSICS AND MECHANICS.

After as careful an investigation as we could make in the absence of oral examinations in all departments except that of modern languages, we are entirely satisfied with the manner in which the studies are arranged and conducted.

We conferred with many of the professors and heads of department, and feel convinced that, in view of the nature and scope of the school, the course is compact, thorough, and adapted to its end.

We feel called on to propose no change other than that embodied in this report on the standard of scholarship, and desire to bestow the heartiest commendation on all that we have seen.

FINANCE AND LIBRARY.

The Board commend the economical administration of the financial affairs of the Academy, and approve the present system of purchasing supplies, by which a large annual saving is made.

The library was found to be in most excellent condition. It now consists of about 22,000 volumes of professional, scientific, and historical works, and the average yearly increase is about 700 volumes.

We recommend that the usual annual appropriation for the purchase of books be continued.

STANDARD OF SCHOLARSHIP.

We have considered with some care the question of scholarship in the Academy, and it is the unanimous opinion of the members of the Board that the standard is not too high. We find that the heads of department have been faithful and conscientious in their work, and the results satisfactory.

We recommend that the choice of the branch of service to be entered be made by each cadet, subject to the decision of the Academic Board, at the end of the third year, instead of the sixth, as provided for by the present law.

We also recommend that the fourth year be devoted to technical studies adapted to their special courses, and that at the end of the fourth year those for whom there are no vacancies shall receive the customary diploma and be discharged from the service.

In conclusion, we commend the Naval Academy to your favorable consideration, and we solicit for it the liberal support of the Congress of the United States.

Very respectfully, your obedient servants,

J. C. HOWELL, *Rear-Admiral.*
E. G. LAPHAM, *United States Senate.*
SAMUEL A. GREEN, *Massachusetts.*
GEO. I. RICHIE, *Pennsylvania.*
EDWARD V. KINSLEY, *New York.*
JOHN W. DINSMORE, *Illinois.*
THOMAS UPDEGRAFF, *Iowa.*
ANSON G. McCOOK, *New York.*
IRVIN McDOWELL, *Major-General, U. S. A.*
R. Q. MILLS, *Texas.*

Hon. WILLIAM E. CHANDLER,
Secretary of the Navy.

REPORT OF THE ADMIRAL.

WASHINGTON, D. C., *November* 19, 1883.

SIR: In compliance with your order, I beg leave to submit the following report.

During the past summer I visited the torpedo station at Newport, R. I., and among other matters of interest noticed a new contact torpedo, the best of the kind I have seen. It not only explodes by contact, but it can be fired by electricity, by closing the circuit on contact, which renders an explosion absolutely certain. The whole arrangement is admirable of its kind, and for boat-torpedoes leaves little to be desired.

Unfortunately our steam-launches supplied to vessels of war are not at all suited for torpedo-boats, not having speed or capacity for carrying with effect a properly constructed torpedo. We have adopted rather a heavy form of launch that may do very well in smooth water or against vessels at anchor, but will never be able to operate successfully against vessels in motion, and will be liable to swamp in anything like a sea-way.

There are two steam-launches in Newport, one attached to the New Hampshire and the other to the torpedo station. The New Hampshire's launch has been in constant use for upwards of a year, and is in every respect suitable for naval purposes. Why could we not have a boat of similar character for the general service, instead of the present heavy, clumsy, and unseaworthy launches that continue to be built for the Navy?

The Board of Inspection and Survey last summer examined a number of pulling-boats, among them the French barge, the two Selfridge boats now in the training squadron, and others, with a view to the reorganization of our boat system. To render the examination more complete, I beg leave to suggest that the Board of Inspection be directed to institute a competitive trial between the New Hampshire's Herreshoff boat and the steam-launch at the torpedo station and any regular Navy steam-launch that may be selected by the Department; the trial to be made in Newport Harbor, and one of its conditions to be the testing of the sea-going qualities of the boats.

To show that the Herreshoff launches have received the favorable indorsement of the Engineer Corps in all that relates to their steam generators and engines, I quote herewith a report to the Bureau of Steam Engineering which gives full information on the subject:

NEW YORK NAVY-YARD, *October* 26, 1880.

SIR: In compliance with the Bureau's telegram of the 21st instant to forward a preliminary report in general terms of the results of the competitive experiments made at Bristol, R. I., by the Board of Chief Engineers of the Navy, convened for that purpose by the order of the Navy Department dated June 4, 1880, on a Navy steam-launch and on two Herreshoff steam-launches, we have the honor to submit the following:

All three steam-launches were of wood and had nearly the same dimensions. The Navy launch was coppered; the other two were uncoppered, but smoothly painted.

The Herreshoff launches were duplicates in all respects except engine, one of them being fitted with compound and the other with simple engines of equivalent power, but the boilers and screws of both were identical. The engines of both Herreshoff launches had the cylinders connected at right angles; they were condensing engines fitted with surface condensers, and the combustion in the boilers was by natural draught. The engine of the Navy launch consisted of a single non-condensing cylinder, and the combustion in the boiler was by the blast of the exhaust steam delivered into the chimney.

The extreme length of the Herreshoff launches was 33 feet 1 inch; extreme breadth, 8 feet 9 inches; mean draught of water to rabbet of keel with everything ready for *steaming*, full bunkers, and seven persons on board, 1 foot 7 inches; displacement of

sea-water at this draught, 8,929 pounds. The weight of the launch, including machinery for storage on board ship, was 6,555 pounds.

The Navy launch was 33 feet 8¼ inches in extreme length, 8 feet 7 inches in extreme breadth; mean draught of water to rabbet of keel, with everything on board ready for steaming, full bunkers, and four persons, 2 feet 2 inches. Displacement of sea-water at this draft, 16,682 pounds. The weight of the launch, including machinery for stowage on board ship, was 13,364 pounds.

The simple engines of one of the Herreshoff launches had two cylinders of 4½ inches diameter, and 7 inches stroke of piston. The compound engine of the other Herreshoff launch had two cylinders of 4½ and 7 inches diameter, with 7 inches stroke of piston.

The boilers of both launches were of the patent Herreshoff coil type, with 6 square feet of grate surface. The screws were of brass, four-bladed, 31.3 inches in diameter, 4.6 inches in length, and 44 inches in pitch.

The cylinder of the Navy launch was 8 inches in diameter, and 8 inches in stroke of piston. The boiler was of the cylindrical return-tube type, and contained 6.5 square feet of grate surface. The screw was four bladed, 35 inches in diameter, and 54 inches in pitch.

With the launches and machinery above described there were made numerous series of experiments as exhaustively as practicable. The vessels were tried over a measured base at speeds varying from 5 to 11 statute miles per hour, increasing in regular progression by half a mile at a time, and in both smooth and rough water. The machinery was thoroughly tried, both with the vessels in free route and secured to the dock, with every possible variation of boiler pressure from 10 pounds to 100 pounds per square inch above the atmosphere, increasing by 5 pounds at a time, with every possible variation of piston speed, preserving the same piston pressures obtained by first depressing the stems with weights and then raising them by means of a floating derrick, with every possible measure of expansion for the steam of the different boiler pressures and with the different speeds of piston, and, finally, by disconnecting the high-pressure cylinder of the compound engine and operating the low-pressure cylinder alone, experimenting with the same ranges of boiler pressure, measures of expansion, and piston speeds as before. In brief, the experiments were made to cover every possible variation of speed of vessel, boiler pressure, measure of expansion for the steam, and speed of piston, and for both the simple and the compound engine. Lastly, an extensive series or experiments were made on superheated steam under the conditions of different steam pressures, speeds of piston, and measures of expansion.

Each of the series embraced a large number of experiments, the whole occupying about ten weeks of uninterrupted work during June, July, and August, 1880, from 5 o'clock in the morning until 8 and 9 o'clock in the evening, during which about 24,000 indicator diagrams were taken.

From the indicator diagrams, a set of which was taken every fifteen minutes during the long dock trials, and as often as the paper could be changed on the instruments for the trials in free route over the measured base, the power developed in each case can be exactly ascertained.

The coal (anthracite) consumed was all carefully weighed, as well as the refuse from it in ash, clinker, dust, and soot. The feed-water pumped into the boiler was also accurately measured, so that in each experiment not only the power exerted, but the cost of that power in weight of crude coal, of its combustible portion, and of the weight of feed-water or steam consumed, can be known. In fact, the data taken were complete in all respects, leaving nothing to be desired in this particular.

Until the indicator diagrams are computed, the data reduced, and the results generalized, no exact facts can be given, but the following general opinions, arrived at by close observation during these long and exhaustive experiments, can be depended on with every confidence that they will be confirmed when our report is made in extenso.

1st. *As regards the hulls of the launches.*—The models of the Herreshoff launches and the distribution of their weights have been so perfected by long and intelligent experience and experimenting as to scarcely leave room for improvement—the Herreshoff Manufacturing Company having for many years made a specialty of designing, constructing, and testing steam-launches, steam-yachts, steam torped-oboats, and similar vessels. The material is of the best quality, well seasoned, and carefully selected. It is so distributed in the construction of the hulls that the required strength is obtained with the least weight; the thoroughness and perfection of the fastenings being depended on, instead of masses of material poorly secured. The workmanship cannot be excelled in neatness, finish, and skill. These hulls combine the maximum of strength with the minimum of weight, which is the end to be attained in this class of vessels where lightness is of the first consequence for stowage on board ship, carrying capacity, small draught of water, and speed. In all these particulars of model, construction, combination, strength, finish, lightness, quality of materials, and work-

manship, the Herreshoff steam-launches are incomparably superior to the Navy launches, a superiority resulting from the fact that the latter are only occasionally designed and built at the navy-yards, and then by persons whose skill and experience lie in the designing and constructing of large vessels, and who devote little or no attention to what is considered as comparatively a small matter, but which, if the highest excellence is to be attained, requires much special training and experience.

2d. *As regards machinery.*—The system of machinery employed in the Herreshoff launches is quite original in most of its details. It is diametrically opposite to that which is used in the Navy launches, and is in every particular greatly superior to the latter.

In the Navy launches a single cylinder is employed, and the starting and stopping are consequently uncertain and slow, with the risk of damage and accident from running into wharves and vessels, and also loss of time.

In the Herreshoff launches two cylinders are employed connected at right angles, with the resulting quick and certain starting and stopping, saving of time, and freedom from risk of accident by collision.

In the Navy launches, steam of high pressure, 80 to 100 pounds per square inch above the atmosphere) is used almost without expansion, and it is generated in a type of boiler whose strength is only moderately in excess of the pressure. This steam is not condensed, but is exhausted direct into the chimney of the boiler to cause sufficient draught for generating the disproportionally large quantity of steam required with this system.

In the Navy launches the steam is thus used with the least possible economy, being worked almost without expansion against a considerably higher back pressure than the atmosphere, owing to the resistance of the blast; hence, for a given power, more machinery is required, with its increased money cost and weight and bulk to carry, than if the steam were used more economically; or, for a given weight and bulk of machinery, less power is developed and consequently less speed of vessel is obtained. If more machinery be placed in the vessel to increase the speed, the greater immersion given to the hull by the greater weight acts of itself to diminish the speed, while the greater bulk diminishes the space for the persons or things to be carried.

The use of high-pressure steam causes more heat radiation from the boiler and engine, which is very objectionable in the small spaces of a launch; the quantity of coal consumed in a given time being greater, the fireman's labor is proportionally greater; while the blast in the chimney is not only annoying to the persons embarked, by sending sparks, ash, and dirty water over them, but the noise it makes, besides being very disagreeable, is so loud as to be heard for several miles, giving an enemy timely notice of approach, and almost wholly unfitting these launches for any military purpose where secrecy and surprise are essential. As the steam is not condensed, and as the boiler cannot use sea water, tanks of fresh water have to be carried for feeding it.

The vessel's load is thus increased by the weight of water and tanks carried, deepening her draught of water and correspondingly lessening her speed, besides occupying space to the exclusion of persons or things to be carried. In fact, the consecutive use of the launch is limited to the time for which the tanks will supply the boiler with water, and at the maximum speed of the vessel they contain but a few hours' supply. The military value of the launches, therefore, in expedition, towing boats, carrying dispatches, &c., is very limited; and any system that would increase their efficiency in this respect should be promptly adopted.

In the Herreshoff launches the engines are by preference of the compound type and of the simplest design; the two cylinders are connected at right angles, and the control of the vessel is thus made complete, there being no time lost and no uncertainty in the starting, stopping, and backing.

There are no independent cut-off valves, the difference in the areas of the piston of the two cylinders giving, without that complication, an expansion of from four to five times, so that all the economy possible from this source is attained. The boiler is practically inexplodible, being composed of a coil of iron pipe from 2 to 3 inches in outside diameter, according to size of boiler. The steam pressure carried, however, is comparatively low, ranging for ordinary use from 40 to 60 pounds per square inch above the atmosphere, the engines being made strong enough to run under a pressure of 150 pounds, or as much as the boiler can be made to furnish.

This boiler has a forced circulation, is absolutely safe, both on account of its strength and of the very small quantity of steam and water which it contains; it is operated by natural draught, which, however, can be increased by a small steam jet thrown into the chimney whenever there may be a demand for the maximum quantity of steam. The economic vaporization is as good as that of any other marine boiler. This boiler, owing to its forced circulation, with the feed-water entering at the top of the coil, while the steam is drawn off at the bottom, can be successfully employed with the highest rate of combustion given by a powerful fan blast delivering the air into a closed ash-pit; that is to say, with a combustion of 50 pounds of coal and over per square foot of grate surface per hour, being in this respect the only boiler com-

posed exclusively of tubes that can be worked at exceptionally high rates of combustion.

In all other boilers of this kind the rate of combustion is limited by the fact that as soon as the quantity of heat thrown in a given time on the tubes reaches a very moderate amount, the water is driven from the iron, which, deprived of that protection, speedily burns out.

The coil boiler is the lightest ever constructed for its power, and the weight of water contained in it is the least. This boiler is the peculiar feature of the Herreshoff system, and the only part patented.

The engine is condensing, the steam from the cylinder being exhausted into a surface condenser of the simplest design and lightest execution, formed by a copper pipe secured to the outside of the hull just above the keel. By this means the boiler is supplied with fresh water, and the slight quantity lost by leakage is restored from a small tank situated beneath the boiler.

The continuous service of the launch is thus limited by only the weight of coal it can carry, and not by the weight of the water it can carry.

The bunkers can be easily and quickly refilled from other vessels at any locality, but the filling of tanks with fresh water can only be done where fresh water can be obtained.

The use of condensing engines with surface condensers renders the Herreshoff steam-launch of real military value from the length of time it can continuously steam, and from its freedom from noise. There is no puffing and screaming of the steam exhausted into the chimney, after the manner of a locomotive, nor is there any noise from steam blown off at the safety-valve when the engines are stopped temporarily, as the steam is then blown from the boiler directly into the condenser, and there condensed; the condenser, under these circumstances, cannot be overheated, as the outboard pipe is in continual contact with continuously changing outside water, even when the vessel is at rest.

The Navy launch carries 960 pounds of coal in the bunkers and 2,500 pounds of water in the tanks, and in smooth water can maintain a speed of 7 statute miles for four consecutive hours, after which the tanks must be refilled.

The Herreshoff launch carries 1,120 pounds of coal in the bunkers, and can maintain a speed of 7 statute miles for twenty-eight consecutive hours, after which the bunkers must be refilled.

But if there be added to the fuel weight the 2,500 pounds in water in the Navy launch, then, the consecutive steaming of the Herreshoff launch can be extended to ninety-eight hours.

The maximum speed of the Navy launch was 8.5 statute miles per hour, and of the Herreshoff launch 11 statute miles per hour.

When the two launches were tried together in very rough water, against a strong head wind and sea, the superiority of the Herreshoff launch was much more marked than in smooth water. While the Navy launch took in so much water over the bows as to endanger her safety, and to require constant bailing with buckets, the Herreshoff launch was dry. She was much better trimmed, lighter, more buoyant, and every way superior in nautical qualities to the Navy launch, at the same time making double the speed.

As regards economy of fuel, the Herreshoff launch develops the indicated horse-power with less than half the coal required in the Navy launch.

In every particular the superiority of the Herreshoff launches to the Navy launch was so marked as to be apparent to the most cursory observation. Their weight was one-half, and their economy of fuel was double; their nautical qualities were much finer; their carrying capacity was greater; their finish and general arrangement were better; they were noiseless, and their capability of continuous service was enormously greater. The superior adaptability of the Herreshoff system to that of any other known to us for steam launches, steam yachts, steam pinnaces, torpedo-boats, small gun-boats, &c., is so unquestionable that, after the most extensive experiments and thorough examination of the subject, we are constrained to recommend it, though comparatively new, to the serious attention of the Department for such classes of vessels. The management of the boiler differs from the management of boilers of other types, but is soon acquired by the humblest intelligence, and we believe the engineering of the Navy should be familiarized with it as speedily as possible, as its use is certain to extend as its merit becomes understood.

Very respectfully, your obedient servants,

B. F. ISHERWOOD,
Chief Engineer.
THEO. ZELLER,
Chief Engineer.
JOHN B. CARPENTER,
Chief Engineer.

Engineer-in-Chief WILLIAM H. SHOCK, U. S. N.,
Chief of the Bureau of Steam Engineering, Navy Department.

The Coasters' Harbor Island station for training naval apprentices has not a cheerful aspect, though its dismal appearance was doubtless heightened by the rainy weather in which I saw it. The place has no appearance of a naval station, aside from the flag-staff that stands on an eminence, nor will it ever realize the reasonable expectations of the service, while its most prominent feature is the pauper establishment, which prevents the Government from using the buildings, which could be made serviceable to the Navy in many ways.

It seems to me inconsistent with the character of a naval station to have the public buildings filled with paupers, and the necessary work of the station is more or less hampered by the presence of an element which has nothing in common with the Navy.

I will mention one way in particular to which the buildings might be applied. Owing to the paucity of ships in the Navy, the Department is at a loss how to employ its officers, and I would recommend that the buildings referred to at Coasters' Harbor Island be used for the purpose of establishing a post-graduate school for officers, who should be afforded every opportunity to perfect themselves in the higher branches of education, and acquire a more practical knowledge of what they have been theoretically taught at the Naval Academy. There should be a well-digested plan of instruction, including a thorough knowledge of the steam engine, iron shipbuilding, and gunnery in all its branches.

This plan would involve comparatively little expense; the instructors could be found in the Navy, the buildings are already ample for a school of forty or fifty pupils, and officers could at the same time derive all the advantages to be gained from the torpedo station. Such an institution would be very popular in the service.

My own experience tells me that young men graduating from the Naval Academy, no matter how high their standing, have but a superficial knowledge of much that has been crammed into them, and would very willingly, after a course at sea, attend a school of instruction where they could make themselves thoroughly acquainted with all that in these days of progress it becomes a naval officer to know.

The Navy should keep up with the times. If this post-graduate system had been adopted ten years ago our officers would not now be involved in perplexities in regard to building ships and making guns, the experience of the naval powers of Europe would be familiar to them, and there would be no difficulty in obtaining a sufficient number of officers for any duty where scientific attainments and practical knowledge are necessary.

To show how this matter is viewed by the Army authorities, I will instance the school at Fortress Monroe, where officers are sent as soon as possible after graduation from West Point.

Any one can see the advantage such a school of instruction would be to the Navy. Much, of course, would depend on the manner in which the post-graduate course was inaugurated, the character of the commanding officer, and of the instructors appointed to assist him.

As the torpedo school has been established with such great advantage to the service, there would appear to be no reason why Coasters' Harbor Island should not supply another pressing want to the Navy besides serving as a training station and drill ground for the naval apprentices. While the paupers remain in the buildings they must necessarily wear out the premises, as no money is expended for repairs, and their cattle occupy a large portion of the grounds.

It seems to me that the State of Rhode Island has had sufficient time

to provide for the indigent people elsewhere, and that further delay will interfere greatly with the advancement of the training school.

I have read in the newspapers certain reports in relation to the new steel-armored vessels designed for the Navy by the Advisory Board, and, although such publications may not be considered "official," I think I am warranted in considering them as expositions of the opinions of the Board, and therefore beg leave to make a few remarks on the subject. I am anxious that the Board should succeed in this the first attempt to rebuild our decaying Navy, and do not write in anything like a fault-finding spirit, but I take a practical view of the case, in which I think I am justified by my long experience.

The proposed vessels are intended as cruisers in time of war and in time of peace. A few years ago the powers of Europe, including even the Ottoman Government, consulted together with a view of abolishing privateering, and of establishing what should be considered contraband of war. Among other things, it was decided that all kinds of coal should be so considered. In case of our having a war with any foreign power all the coaling stations of the world would be closed against us; hence the necessity that we should build vessels having full sail and steam power, so that they could make good speed cruising under sail, with fires banked ready at a moment's notice to get up steam.

Take the Chicago for example. It is said she will have only 14,000 square feet of canvas in her principal sails. Any seaman knows that so small an amount of canvas can only be considered "auxiliary," and would only propel the vessel through the water in a very fresh breeze. With the very peculiar rig of the Chicago, without bowsprit and jibs projecting beyond the bow, no vessel would work under sail in smooth water, much less in a heavy sea.

Wilson, in his treatise on shipbuilding, says—and he is supported by numerous authorities—

> The capacity which a ship possesses for being maneuvered depends on the proportionate areas and moments of the head and after sails, and on the position of the two separate centers of effort of those two sets of sail. What the power of maneuvering by sail must principally depend upon is the horizontal distance between the separate centers of effort of the head sail and after sail, for that distance is the lever at the two ends of which those two sets of sails act in turning the vessel.

Both jibs and spanker are necessary in maneuvering a ship, especially a long one; the after sail in checking the tendency of a ship to lose her headway, and the head sail to get her round and pay her off when having passed the direction of wind ahead.

To show the importance of the head sails in a ship of the Brooklyn type, having a length of about 250 feet, the area of her jibs and fore staysail includes about 3,080 square feet, being 780 square feet more than the area of the foresail. The whole amount of sail in this comparatively small ship is nearly 22,000 feet.

It may be argued that the proposed ships will not be required to maneuver, and that they will always work in important cases under steam; but in war it is necessary to guard against every contingency, and even in time of peace every effort should be made to economize coal, the careless expenditure of which eats up the public treasure. What a steamship consumes in coal would in a few years buy a new vessel.

There is no reason why a cruising ship of war should not be full power in sails and masts. In the days anterior to steam, when ships had to depend entirely on their sails, the masts and rigging had to be made very heavy to enable a vessel to carry sail in gales of wind, claw off a lee shore, chase an enemy in all weather, or escape from one. Now all that

is changed. War vessels can work under steam in case of necessity; the ponderous masts are no longer necessary; masts and yards can be made of steel, reducing their diameter one-third, and with the many appliances for hoisting and lowering, a ship of war, if well disciplined, can be reduced to her lower masts in a very few moments. The same area of sail, compared to immersed midship section, can be carried now with less trouble than before, and is necessary to make an efficient cruising vessel of war.

When steam was first introduced into the Navy it was considered that a more powerful cruising vessel could be made by having auxiliary steam power and full sail power than the reverse, and good arguments were advanced for it, the principal being that a ship of war could keep the sea much longer.

I am not an advocate for extremes, but am certain that no ship will be a first-class cruiser unless she has sail enough to send her 13 knots through the water, off the wind, and 10 knots by the wind. That is about the speed of our old first-class frigates and ships of the line with their full bows. The finer lines of to-day ought to do better.

I will suppose a case of two ships of war meeting at sea, of equal size and weight of metal. The machinery of both vessels may be injured, and both may have to depend on their sails. The one that is the best rigged and with the position of the center of effort of the sails so fixed that the steamer will work as well as the old-fashioned sailing ships, which can be accomplished, will sail around the other vessel and compel her to surrender.

A ship of war for cruising, then, should not only be fitted with a full area of square sails, but she should have all the usual jibs and trysails, and have light stays between all the masts where the latter could be set. A ship so rigged would make the passage from New York to Australia, keeping in the trades, and steaming only through the tropics, almost as quickly as if under steam alone. It can easily be seen what an advantage a vessel rigged in this way would have over one with "auxiliary sail power." She could keep the sea as long as her provisions lasted.

It may be said that the comparatively narrow beam of modern ships is opposed to their carrying sail according to the ordinary rule, but the great length of these vessels, with the enormous weights of boilers and machinery carried low down, gives them a stability not possessed by the old-fashioned sailing ships of war, and they could carry topgallant sails when the latter would have to take a reef in the topsails.

I think no practical man will doubt the propriety of having our vessels of war equipped with sail power, with comparatively light masts and yards, and with the greatest possible number of light fore and aft sails that can be put upon them in ordinary weather to expedite a passage. If steel masts are objected to on account of the extra expense, pine spars could be used of much smaller proportions than the old fashioned masts, although I consider steel preferable, as it reduces their size.

In case we should have a war with any foreign nation all ports will be closed against our cruisers, so far as obtaining coal or munitions of war is concerned, and our vessels after consuming their coal must either lie idly by until a supply is sent from home or make an effort to reach the United States under sail, with perhaps fuel enough on hand to run a blockade at the end of their cruise. Without full sail power, a ship of war would make but slow progress under these circumstances.

You have seen the Trenton under way with all her masts and yards aloft. She is a good specimen of a full-power sail and steam ship,

though rather oversparred. With ten days' supply of coal, all she can carry for want of proper accommodations, the Trenton is superior in peace or war to any half-sparred cruising ship we can build. While her coal lasts she can steam at the rate of 13 knots an hour, and hold her own under sail with any frigate in existence. She could cruise if necessary for six months without using coal, and would prove a most formidable commerce destroyer to any nation with whom we might be at war, barring her want of great speed. But, after all, the Trenton is not a good *fighting ship* for a vessel of her size, and would be, in war, but a commerce destroyer.

You remember what the Alabama, with inferior size and slow speed, accomplished during the late civil war, and can easily imagine what a fast ship under sail, like the Trenton, having a fair amount of speed under steam, could accomplish against a mercantile marine, yet, as I have said before, as a fighting ship the Trenton is not a success.

While I was at the Yorktown celebration, in 1881, there was present the Magicienne, an old-fashioned French steam frigate. She carried twenty-four heavy 6-inch rifled guns on her gun-deck and four on her spar-deck, the latter to be used either as chase or broadside guns. This vessel ought to destroy the Trenton in about fifteen minutes, the latter being armed with 8-inch converted guns, of which no one gives a satisfactory account.

A vessel of even 2,500 tons displacement and with greater speed than the Trenton would not equal the latter as a commerce destroyer; that is, if she was a hybrid sail and steam vessel. A large portion of the ocean commerce is now carried on by swift steamships, many of which average their 15 knots across the Atlantic, and in time of war the greater part of an enemy's commerce would be carried in such vessels. Now and then a comparatively slow steamer might fall a prey to our cruisers, but this would not often happen. Nearly all the European steamship lines, Messageries, Peninsular and Oriental, &c., are composed of large and fast vessels, capable of overcoming the resistance of the heaviest seas, which would swamp a vessel of small dimensions attempting to force her way in chase.

The Boston and Atlanta are the smallest-sized commerce destroyers that should be built, and while it may be well to build eight or ten of the Dolphin class, as dispatch vessels to squadrons, I do not think they could be relied on to do any fighting in time of war. The Dolphin class of vessels could do little in such weather as one meets with in winter on the Atlantic, although to the great ocean steamers such weather is encountered with nearly the same ease as our steamboats make the run between Newport and New York.

It may seem absurd to apprehend a war between England and the United States, since their interests are so mixed up in commercial enterprises, but should such a calamity occur, most of the fast steamships of Great Britain would be withdrawn from commerce and armed with heavy batteries. In such a case how long would it take for a steamship like the Oregon or the Alaska to overhaul and capture small "commerce destroyers"? The ocean would swarm with these converted merchant steamers, and they would effectually control it.

Therefore, while we are rebuilding our Navy it seems to me—and I know many thoughtful persons are of the same opinion—that we should build a class of swift vessels like the Oregon and the Alaska, and, if possible, more enduring. We might not need them in time of peace, but we should have them ready for emergencies, as the Army stores away artillery, muskets, torpedoes, and other munitions of war. It is

not as if we had to build wooden vessels, the age of which is limited to a few years, for the proposed vessels would be constructed of iron that with proper care would last half a century.

During our late civil war, when England and France assumed a hostile attitude toward the United States Government and seemed desirous of a quarrel, our Government adopted a policy which caused those nations to stop and consider the probable consequences to them in case they should attempt to interfere in our concerns. Congress, on that occasion, did not stop to count the cost or speculate what might be the profits of contractors, but with a liberality which does them credit poured out the money in the Treasury, to spare our country the humiliation of being browbeaten by European powers, and thus averted what might have proved a catastrophe to the Union.

At that time English war and merchant steamers had reached what was considered perfection, but we went boldly to work, trusting to the ability of our constructors and machinists, and laid down the following vessels: Neshaminy, Idaho, Ammonoosuc, Manitou, Pushmataha, Guerrière, Illinois, Minnetonka, Piscataqua, Contoocook, Mosholu, Pampanoosuc, Kewaydin, Wampanoag, Antietam, Iowa, Ontario, Chattanooga, Madawaska, Hassalo, and Wautauga. Some of these vessels were never finished, and, owing to the return of peace, were left to rot on the stocks, in accordance with a long-established system in the United States Navy, by which millions of dollars' worth of property has been allowed to go to decay, all for the want of a sufficient annual appropriation by Congress for its care and preservation.

Some of the vessels above named were built of unseasoned timber, the best that could be procured at the moment, and soon went to decay, but those that were placed in commission gave such results in speed that our transatlantic friends paused to consider. The Wampanoag, now the Florida, when tried in rough weather, averaged 17½ nautical miles an hour for over twenty-four consecutive hours, the fastest speed that had up to that time been made by any steamer on the ocean.

Had these vessels been built of iron we might not at this day be complaining of a decayed Navy, since, if properly taken care of, they must still be serviceable.

Now, here is a case where Congress appropriated money for 65,890 tons of fast steamers, real commerce destroyers, all larger than the proposed Boston class, and eleven of them as large or larger than the proposed Chicago. I hardly think the foreign Governments referred to would have been impressed with such vessels as the proposed Dolphin class.

No matter how fast a steamer may be, unless her guns are powerful she will have but little prestige. In time of war, especially a war in which Great Britain, France, or Germany is involved, their merchant steamers will go heavily armed and be able to beat off any small cruisers with few guns. Great Britain has in her navy, or stored away in naval arsenals, nearly seven thousand rifled cannon, and could procure as many more in Europe at short notice. France and Germany have every facility, in their great workshops, for making all the guns they will ever need, and their naval arsenals are doubtless well supplied. Russia and Italy have great gun foundries, and doubtless all these nations have had forethought enough to provide guns, not only for the ships of war to be built in the future, but to arm all their merchant steamers available for war purposes.

Merchant steamers of the present day will become great factors in case of war, and many of them will be found even superior to unarmored

ships built especially for war purposes. Vessels like the Alaska and Oregon would find no difficulty in carrying twenty 6-inch rifled guns, besides two 25-ton guns on pivots, properly protected with shields. I instance these two ships because they represent the latest and best type, and though they may appear to naval officers rather large to handle, a familiarity with this class of steamships would soon satisfy them that in time of war they would be successful ships. Their coal capacity would be tremendous; they could carry six months' provisions, and their commanders might laugh at Atlantic seas.

In adopting a policy for building up a navy in the future, great care should be taken that we do not fall back upon the construction of a small class of vessels, as seems to have been the policy since 1865. From the close of the civil war we have built no large vessel except the Trenton, and she only of 2,300 tons burden, or 3,900 tons displacement, and have used the available funds on vessels of 981 tons burden, or 2,200 tons displacement, none of which have equaled the old Kearsarge class of 695 tons burden, or 1,500 tons displacement.

The Kearsarge is to-day the best vessel of her class in the Navy. She sails and works like an old-fashioned sloop-of-war of the first class, making 12 knots or more per hour under full sail, and 12 knots under moderate steam. She is a good sea-boat and could go round the world without using coal, and do much better in time of war than a faster steamer with small sail power.

But though the Kearsarge might do service as a commerce destroyer, she is too small a vessel for war purposes, and could not contend like one of the great ocean steamers against heavy gales, making good time day after day and finally making port after a fair average passage. She is a good ship in time of peace, but though she battled successfully against her equal, the Alabama, she could not hold her own in a war with one of the naval powers of Europe.

There is, then, no use of building such vessels for the Navy either to defend the coast or as cruisers, for they cannot accomplish any weighty result.

In time of war the European powers would withdraw from service their inferior vessels, for, as well as ourselves, they all have vessels of the old types that are useful in time of peace, and can reach a friendly port at short notice for protection in case of war with a great maritime nation.

As it is universally admitted—and the action of the Inspection Board proves this—that we have no Navy either for offense or defense, I don't see any reason why Congress should not appropriate liberally for an immediate increase of the Navy, as it did in the time of the late civil war.

We are now, in fact, in as bad a condition as we were at the breaking out of that conflict, though then we could conform to the law of nations by buying up every old ferry-boat and rattletrap that could mount a gun and using them to blockade the Southern ports.

We could not for a long time find a suitable vessel to pursue the Alabama, which was destroying our commerce at leisure and sending fifteen million dollars' worth of property to the depths of ocean. That one vessel, not of unusual speed, dealt a blow to our commerce from which it has never recovered, all because we had not a dozen fast cruisers to send to different parts of the world in pursuit of her and terminate her destructive career. Had we possessed the means of capturing the Confederate cruisers our commerce to-day might be in a flourishing condition despite the want of encouragement by Congress, but our ship-

owners became disheartened with a system which gave no protection to their interests, and finding, when the war was over, that the Government took no steps to build up a navy, notwithstanding the late bitter experience, they gradually withdrew their money from investment in ships and placed it where it was safe from predatory attacks by any nation that chose to go to war with us.

If Spain, the least formidable of maritime nations, should go to war with us to-morrow, she would sweep our gradually increasing commerce from the ocean by setting afloat the large swift steamers she could buy in Europe, and we could not prevent it. Our vaunted "home squadron" and the "six tugs," which one of our statesmen declared a great auxiliary to our naval force, would retire under Sandy Hook or the friendly guns of Fortress Monroe, and be obliged to look quietly on while we were being despoiled, unless they chose to add to the laurels of the despoiler by offering themselves up as a sacrifice to satisfy public sentiment.

This is not an overdrawn picture; it is simply a statement of what is liable to happen. In the end we would no doubt get the better of our antagonists, but would that satisfy the country for a commerce destroyed or repay our people for ravaged coasts and burned cities, for, with all the new appliances for destroying human life and property, the horrors of war are likely to be greater than anything we have ever imagined.

With the private workshops we have in this country we could build twenty large ships in two years. How much better it would be for us to go to work and build a set of vessels for the immediate wants of the Navy. The argument that we can go on improving by building a few vessels at a time is a poor one. Europe in the last twenty years has made such strides in naval architecture that we have nothing to do but copy from the best existing models. We are not likely to improve much on what has been done abroad, and our vessels should reach the highest state of efficiency at present known. There is little difficulty in obtaining plans and specifications of any vessel that has been built, and we could, while holding to the main design, add such improvements as may suggest themselves to our shipbuilders. At all events let us have vessels with speed and guns enough to enable us to hold our own against any power in the world. Do not let us stand in the eyes of the world as a nation of shopkeepers without sufficient patriotism to be willing to spend a fair portion of our enormous revenue to protect our vast domain, which has resources superior to any other country.

What a pitiable exhibit for a country like this is the report of the Chief of Engineers, United States Army, who states that there is not one of our ports that has any defense against even an enemy of very inferior character. I know this to be the case from my own observation, for there is not a harbor in the country where an ordinary iron-clad cannot pass the batteries, choosing their own time for so doing. So it appears that our Army defenses are in the same category as those of our Navy. It is therefore indispensable that both should forthwith take a new departure to insure that effectual protection to our countrymen which they have a right to demand.

It is natural that officers of the Navy, particularly captains and commanders, should be interested in having the types of vessels built to suit their own cases. Therefore they may incline to the smaller class of vessels as being the ones the Department must most likely use in time of peace, fearing the *personnel* may be reduced.

If the Navy is to be rebuilt on a system to suit the wants of the *country*, there ought to be vessels enough to give employment to all our

officers. Captains will be able to get command of vessels from 3,000 to 5,000 tons, and the commanders, of all other vessels.

It is a great mistake to decrease the number of officers in a navy because ships through age or unworthiness are disappearing from the list and the Government has taken no steps to supply their places. The *personnel* of the Navy should be fixed on a permanent basis, and not changed simply because a few officers are left unemployed through no fault of their own. It takes a year or two to build a ship of war, but it takes a number of years to make a first-rate officer, who has to study continually to keep up with his profession and undergo eight examinations before reaching the grade of rear-admiral. Many years' service at sea and close application to study will not always make a first-rate officer, and it is unwise to cut down the *personnel* of a small navy like ours, for officers lost to the service in this way cannot have their places filled in a short time. It is better to build up the Navy and employ the officers. Because the soldiers of a regiment are destroyed in battle or by disease the number of its officers is not thereby diminished, but the ranks are again filled up to reach the Army standard.

If the law of the last Congress, condemning every vessel of the Navy that requires 20 per cent. repairs, is carried out, there will be many vessels retired in the course of a few years that could be kept in serviceable condition five or six years longer by increasing the percentage allowed for repairs. Building only a few vessels at a time, the Navy will be in worse condition than it is at present, and the Navy Register will show a large proportion of officers unemployed.

The 20 per cent. rule might work to advantage if Congress would rise to the occasion with the liberality they have before manifested towards the Navy in its hour of need, and not only appropriate money for the general increase of our ships, but also for the vessels that will be condemned, in the absence of such appropriation, two years from now.

The system of condemning such vessels of war as require an outlay of 20 per cent. for repairs is a wasteful one and ought to be abandoned; 40 per cent. would, in my judgment, be a more reasonable limit, and, by adopting it, many vessels might be saved to the service until we are able to build a real navy. For instance, the apprentice training ships, which cannot be dispensed with, will go on the retired list as soon as any attempt to repair them is made, and they will shortly require extensive repairs, while under a 40 per cent. rule they could be made to do duty eight years longer.

Take for example a steam vessel of war that originally cost $600,000. Her engines and boilers, costing $200,000, might be in good order, wanting but few repairs, while the hull would perhaps require 40 per cent. of her cost to make it as good as new. This would be $160,000. The 20 per cent. required by law would be in this case $120,000; the vessel would be condemned and a new one built costing $600,000. So by the 40 per cent. system the Government would expend only $160,000, or less than half the cost of a new hull.

The same rule would apply to the engines and boilers of a ship which might be partly worn out while the hull was nearly as good as new, although such a state of things does not often happen, the hull generally giving way first.

No navy can be maintained economically when ships are condemned because the required repairs amount to 20 per cent. of their cost. Under this rule, in a few years, all the ships in the Navy would disappear, and

be purchased by some of the small republics of South America, where painted and patched up, they would run for years.

To my knowledge too high an estimate has hitherto been given for repairs at our navy-yards. Employés of a navy-yard will naturally incline to the opinion that a ship wants extensive repairs. They want to make work for the people in the yard, and it sometimes happens that a ship has more than twice the amount of repairs put upon her than she requires. I remember the case of the frigate Constitution as far back as the year 1843. She was condemned to be rebuilt entirely, when Captain Percival, a prime old-fashioned sailor, applied to the Department to permit him to take command of the ship as she was, with hull, spars, sails, and boats, and make a voyage around the world. Permission was granted and the voyage was made. The ship was absent some two years, proved herself a staunch vessel, and outsailed every ship of war she fell in with.

There have been many cases where ships have been pulled to pieces unnecessarily, but after all we thereby obtained what was practically a new vessel at a smaller cost than it would have required to have constructed her in any other manner.

There is a very simple remedy to prevent the unnecessary pulling to pieces of ships requiring repairs, and to prevent unnecessary repairs to boilers and engines. I recommend that no ship be repaired until she has been carefully examined by the Board of Inspection and Survey now established by law, the amount of repairs to be limited to the amount recommended by the Board. At present a ship requiring repairs is surveyed by a board of officers belonging to the navy-yard, assisted by the master workmen as experts. Under such circumstances an impartial survey is hardly to be expected; it would require too much from human nature. The master workmen are not going to throw away a chance of prolonging their employment and that of the numerous mechanics under them. The plan I propose will, I believe, much improve the present manner of surveying vessels requiring repairs.

I do not think captains and commanders need despair of obtaining commands even if the present plan of the Advisory Board is carried out. Besides the cruisers, I notice the Board propose a class of vessels greatly needed in the Navy for coast defense and for duty in the Chinese waters. Late events have shown the necessity of maintaining a strong naval force in that quarter in the shape of vessels that can penetrate the rivers of China.

I think the Board correct in the estimate of the tonnage and draught of water these vessels should have. They could be made the most effective in the world of their class, and, if moderately plated with steel about the bows, could operate in inland waters, even against forts, with more effect than larger vessels. Not being obliged to cruise at sea, they could carry at least a 35-ton gun forward and two 6-inch rifles aft.

The English and French have this class of vessel, and the Chinese themselves possess a sufficient number to drive our present naval force from their ports unless the latter was supported by the class of vessels recommended by the Advisory Board. These small vessels could be built with much greater celerity than larger ones, and there is scarcely a good machine shop in the country that could not furnish their comparatively small engines. We are so deficient in coast defenses that the proposed vessels, armed with heavy guns, would be a valuable auxiliary in this direction.

In speaking of smaller vessels, I include also the heavy armed gunboats recommended by the Advisory Board as forming part of a naval

system for coast defense. If the Board had recommended twenty of these gun-boats to be built at once, instead of two, its action, in view of the present defenseless condition of our coast, would have met the approval of the country. Besides their duties as gun-boats, these vessels could act as torpedo-boats to accompany a fleet, or act against single vessels at night or in a fog.

The future torpedo will doubtless be sent against an enemy by motive power of its own, and such vessels as are recommended, having good speed, would be the best size to send them from. It takes a long time to build monitors and iron-clads, and until the latter are built, which must follow in the course of time, for a complete defense against an enemy, we must have the vessels to which I have referred.

There is not a harbor along our southern coast that is at this moment protected against a pirate—if such a craft could get afloat—and any of the vessels fitted out in this country for the purpose of violating international law by warring against our neighbors, could enter any southern port and set the authorities at defiance. If the Department should be asked for a gun-boat to arrest such marauders, it could not supply one.

I have long had in my mind the class of vessels referred to, and about the year 1872 devised one, about which I beg leave to make a few remarks.

This vessel, the Alarm, has been the subject of much criticism and misrepresentation, and as she is an experiment to try the different types of propellers and steering machines, her character has been misunderstood; but she is to-day, for her size, the staunchest, fastest, and heaviest armed vessel yet constructed anywhere.

I had long foreseen the defenseless condition of our sea-coast, if attacked by foreign iron-clads, owing to our want of naval vessels of a proper type, superior in power of resisting shot and in size, endurance, and speed to those which could be brought against us. The enormous cost of such vessels would prevent their being built before there was an absolute necessity for their use, and when that necessity arrived the slowness of their construction would prevent them from being completed in time to be of service. We experienced the disastrous effect of these causes during the late war. The large and very fast unarmored cruisers commenced by the Navy Department immediately after the beginning of hostilities, for the purpose of offshore blockade and of resisting European interference, were only ready after the war was ended. When the enormous effect of the naval blockade and of the naval expeditions upon the result of that war is considered, an effect believed by many to have been decisive, the value of being able to make the one more stringent and the others more powerful at an early period in the struggle can scarcely be overestimated.

Influenced by these considerations, the problem seemed to me to be the devising of some means by which small vessels, cheaply and rapidly built, might be made effective in the defense of our coasts and harbors against foreign vessels of war. Evidently there was no existing type of unarmored vessel which could fulfill these requirements, so I was compelled to abandon all preconceptions and devise an entirely new type, my ideas on the subject being finally embodied in the Alarm, a vessel which after numerous careful experiments is proved to possess all the desirable qualities I had hoped to combine in her. No improvements have since been made on this vessel as regards dimensions, capability of safely carrying and effectively using the largest known gun, and absolute perfection in maneuvering, by which latter is meant power of turning on her own center of gravity when at rest, with great rapidity, of turning in a

circle in the minimum of time and space when under way, of advancing and retreating with equal precision as to direction, and of instantly changing from forward to backward motion. She can bristle with torpedoes, and, with either gun or torpedo, is the most formidable vessel for her size afloat. Several vessels of this kind would prove successful in a combined attack on a large iron-clad.

My greatest difficulty in planning the Alarm was to obtain machinery that would enable me to realize my designs, especially in regard to the maneuvering power. It was necessary that the steering apparatus should be absolutely perfect; that is, turn the vessel rapidly when at rest, either entirely around, on her center of gravity, or with accuracy through any desired horizontal arc; or, that when the vessel was under way, would turn her in a circle of any given diameter, or any required part of such circle, quickly and with precision; or, that would enable the course of the vessel to be almost instantly changed from ahead to astern, or *vice versa*, without stopping the motive engines or interfering in any way with their action.

The steering apparatus had necessarily to be directly controlled and managed by the officer on deck directing the maneuvering, and such steering efficiency as this could be obtained only from the propeller itself and by the application to it of the entire power of the motive engines. But while the steering was to have all the perfection required, there must be no sacrifice of the vessel's speed to obtain it.

These are very difficult conditions to achieve under any circumstances, and seemed insuperable at the time I was planning the Alarm.

After a careful examination of all the plans that suggested themselves, I decided to adopt provisionally, until something better could be devised, the submerged feathering paddle-wheel placed horizontally, which, although it had never been tried, gave hope of success. This wheel when experimented with completely fulfilled its promise as regards steering efficiency. Its maneuvering power was perfect. Its command over the vessel in this respect was so absolute, and the control so entirely in the hands of the commanding officer that he was able to manage the vessel without communicating with the engine-room, the motive engines working uninterruptedly in one direction and at full speed, whether the vessel was going ahead, backing, or turning. In short, the whole power of the motive engines, without intermission, was applied continuously to the maneuvering.

But as regards giving the vessel the required speed, this wheel was not a success. The trials developed an unsuspected but decided waste of power involved in the direct propelling effort, and to this extent its performance was unsatisfactory.

At this time Col. William H. Mallory brought forward his steering and propelling system. As the propeller was the usual screw employed for submarine populsion, and most advantageously placed as regards the hull, while the steering qualities were of the same kind as those of the feathering wheel, but with increased efficiency, I saw that the device would enable me to solve my problem, and as the Alarm was essentially an experimental vessel, I determined to substitute the Mallory system for its predecessor, especially as the change could be made at small expense without modifying the motive engines or altering the hull of the vessel.

The change having been made, the Alarm was subjected to a thorough course of experiments, with the most gratifying results. The vessel achieved high speed, perfect efficiency in maneuvering, and left nothing to be desired except some improvements in a few mechanical

details suggested by the trials, for in this case, the subject being entirely new, there was no previous experience for a guide.

The motive engines are not as well adapted to the vessel as they should be, but the boilers are sufficient to give her a maximum speed of fourteen knots per hour, which would be realized by new engines better adapted for the economical use of the steam. Such a speed, it must be remembered, is very great for a sea-going vessel of the Alarm's tonnage.

As the Alarm is now, she has no equal for the purposes for which she was built. She is large enough, carries coal enough, and has sufficient accommodations for officers and crew, to maintain her position off the coast in any weather for any reasonable time. She can carry the heaviest gun that can be made up to 60 tons weight, and can use it with a rapidity and precision of fire greater than any other vessel. The hull itself is the gun-carriage, the gun having only a forward and back movement on fixed guides in the fore and aft direction of the vessel. Its training in azimuth is done by the steering apparatus, the entire power of the motive engines being applicable for the purpose. All that the gun's crew have to do, besides loading and firing, is to elevate or depress the muzzle. The vessel, whether advancing or retreating, always has her bow presented to the enemy, thus offering the smallest possible target, and with acute angles of inclination, so that the thin armoring on her bow is a considerable protection. The same gun is used with the same efficiency with the vessel at rest or moving towards or from its object. The peculiar construction of the vessel forward allows her heavy gun to be properly carried and fired without straining the hull. The main torpedo, of the largest and most destructive kind, is protruded by proper mechanism directly forward, below the water line, from the interior of the vessel, the crew working it being well protected from the enemy's fire.

Thus far, then, the Alarm may be considered a complete accomplishment of the uses for which she was designed, and she is the only type of small vessel that, combined in sufficient numbers, could be successfully opposed to iron-clads blockading our harbors or attacking our cities. Her offensive power, in proportion to its money cost, is greater than that of any other vessel, and in case of sudden hostilities with a first-class naval power vessels of this kind are the only ones that could be built fast enough and cheaply enough to be used for home defense in the first shock of the encounter.

Other plans have of late been brought forward for increasing the maneuvering power of war steamers, such as discharging water from a pipe at the stern of the vessel and directly at right angles to the keel, &c., but the difficulty of obtaining the proper mechanical conditions with them, and their inefficiency compared with the system used on board the Alarm, will always prevent their use.

The latest plan for maneuvering vessels by the propelling screw is known as "I. I. Kunstader's patent screw steering apparatus." This arrangement employs two screws of different dimensions, one of which is situated immediately behind the stern-post, and the other behind the rudder. Of the aggregate surface in the two screws, the first contains about two-thirds and the last about one-third. When the rudder is in the direction of the keel, the axes of both screws are in the same straight line. There is nothing peculiar in the large screw, which is fixed upon its shaft in the usual manner. To this shaft, extended through the large screw, the shaft of the smaller screw is connected by a universal joint, the use of which is to allow the smaller screw to be revolved propulsively by the shaft of the large one, while it has also the sideway movement of the

rudder upon which the small screw is supported by a pillar-block in the usual manner. When the rudder is moved by any power applied to the tiller, it carries the small screw with it, and as the latter is revolved by the main engine shaft, a part of the power of that engine is applied obliquely to the direction of the keel, and deflects or steers the vessel accordingly. A fraction of one-third of the power of the motive engine, depending on the obliquity of the rudder, is so applied, and this steering effect is additional to that of the rudder, the two acting in unison.

The method of steering by the propelling screw supported upon the rudder and connected to the shaft of the motive engine by a universal joint is a very old one, and is known as the swiveling screw. It had its origin in the very infancy of screw propulsion, and has frequently been proposed since.

The mechanical objections to it are so great and its capabilities so limited that it has never come into practical use and probably never will. The swiveling of the screw heretofore proposed was for a single screw, the universal joint being situated between the sternpost of the vessel and the screw, the latter being supported on the rudder, whereby the entire power of the motive engine could be applied to the steering simultaneously with the power of the rudder; and if ever the swiveling system is adopted—and there is not the least likelihood it ever will be on its own merits—this is evidently its best application.

An arrangement of the swiveling system, so elegant and mechanical that no improvement upon it has ever been made, was patented in England in 1862 by William Joseph Curtis. Of Curtis's arrangement, Bourne remarks in his work on the screw propeller:

> This appears to me one of the most skillfully-designed arrangements for steering by swiveling the screw, but in all such contrivances there is too much mechanism subjected to a heavy strain, and too many inaccessible joints, to render the practical adoption of such ingenuities advisable, especially as no appreciable benefit seems to have been realized by any of these refinements hitherto tested.

Mr. Bourne's opinion is as sound to-day as when it was written. If, however, the swiveling system be attempted, why should its steering action be restricted to only a fraction of one-third of the power of the motive engine, by limiting its application to a small supplemental screw, instead of using the entire screw surface, and the entire engine power upon it, as Curtis and others proposed? True, the single swiveling screw and universal joint are not patentable, but if the screw be divided into two parts, perhaps the division is, though productive of an inferior result. Mr. Kunstadter's method may be the best for patent fees or royalties, but it is certainly the worst for the steering of the vessel. Under no circumstances, however, can the swiveling system be applied to vessels like the Alarm. Its capabilities are too limited and its action too feeble and slow. It cannot be used to maneuver the vessel or turn her upon her center of gravity without changing her position—that is, without giving her a forward movement. It cannot be used for backing without reversing the motive engines, and is, in fact, much inferior in maneuvering power to twin screws, a system too slow in its action and too imperfect even under favorable conditions.

Upon a full review of the subject, and taking into consideration all its developments up to the present date, I find that nothing has been devised equal to the Alarm, and I am of opinion that vessels of her type should be constructed for home defense, with all the mechanical improvements suggested by the experiments with her. In this manner, and at very small expense, we can be in much better state of preparation for resisting a naval attack than by any other method of expending *the same* sum.

This plan of fighting small vessels bow on, with the power to recede rapidly sternways from an enemy, and again approaching without the vessel's turning her broadside, is founded on correct principles. A vessel, say of two hundred feet in length, instead of presenting that surface to be fired at, presents only the small surface of 22 by 6 feet, the former being a target of 1,200 square feet, the other only a target of 132 square feet, and the uncertainty of striking such a moving target in a seaway, especially with rifled shot which cannot be fired in ricochet.

There are many examples which show the difficulty in striking vessels at sea end on. Witness the many ships chased during the war of 1812, and the numerous blockade-runners fired at sometimes by three or four vessels at once during the late civil war, without being struck. Any kind of firing at sea is an uncertain matter, especially in vessels not built on scientific principles, and not offering a steady platform for guns. This consideration seems to be the last one with modern constructors; hence we see vessels built with bottoms like a barrel that roll themselves to pieces and offer the worst possible platform for guns. All this would have to be carefully considered in light-draught vessels, such as would be required for gun-boats; and I venture to say that if the principle of the Alarm is followed, we will have perfectly steady vessels even in a rough seaway for the Alarm is the steadiest vessel I ever saw, and even in a gale of wind and heavy sea does not roll over ten degrees.

He who undertakes to provide for the defense of the coasts and harbors of the United States must needs be very familiar with their hydrography and topography. If unwise representatives lose sight of the vast interests at stake upon our defenseless coasts owing to their absorption in local matters, they must not consider an officer who has held important trusts insane because he would repair, as soon as possible, the deficiencies that have existed for years. It is a most natural thing to wish to know when the Treasury is in condition to meet the demands of the Navy, and when what we have been foolishly calling a Navy for some years is at its lowest ebb, it is very unwise to try and make it appear that we have a real Navy for defense or for anything else. We have still a few ships that will answer to potter around in the smooth waters of the Mediterranean or South Pacific, but they do not represent an advancing nation like our own, which is ahead of most in all that is called progress. I look at this matter as an expert who knows what will happen if the storms of war should burst upon us. Parties, and leaders of parties, those who have held power and failed to provide means of national defense, will be held to a strict account if the calamity of war should be forced upon us, and our coasts and harbors laid waste by some comparatively insignificant enemy, without our having any means at hand to prevent it.

Some persons, wise in their own conceit, argue that as we have no commerce we do not need a navy, and even the late Senator Sumner was in favor of diverting the amount yearly appropriated for its support, for colleges and charitable institutions. Others have recommended that the funds now appropriated to maintain the Navy be devoted to building up the mercantile marine, forgetting that Congress has the power to build up such a marine by a much simpler method. The idea seems general that we must first establish a merchant marine, and the Navy grow up to it as it advances.

But even at the present time our merchant marine is not so small an affair as most people seem to imagine. In 1882 we had in foreign trade, 1,269,492 tons; in the coasting trade, 2,795,776 tons; in the whale fishery, 32,802 tons, and in the cod and mackerel fisheries, 77,863 tons. Of

these 2,810,108 tons were sailing vessels and 1,355,823 tons were steam-vessels, the whole amounting to 4,165,933 tons. Sailing ships and steamers are, I may say, building rapidly along our eastern coast, and in the city of Bath alone, this last year, as large a number of vessels were constructed as in any preceding year of prosperous times, including two ships of 2,300 tons each. Certainly all this trade requires adequate protection, which it will not obtain while we go on building ships of war at the rate of three or four a year.

In case we were to be involved in war, one fast merchant vessel of the latest type would have our merchant fleet at her mercy, and the ocean would again be lighted up by the flames of American ships as in the days of the Alabama. But it is not one fast vessel we have to fear; in all probability several hundred of them would assail our commerce, and the mercantile marine that in the last eight years has begun to raise its head may be again reduced to the small tonnage of 1865.

We are at peace with all the world, but that peace is liable to interruption at any moment, either from interested motives on the part of another nation or from some action of our own in retaliation for wrongs inflicted upon us with the idea that we are too insignificant a naval power to be feared.

No mercantile marine can grow up and flourish unsupported by a navy. The mercantile marine of Great Britain is the most striking instance of this, penetrating as it does to every corner of the world where a market is to be found, and supported by a great naval force, which fully protects it. An English vessel is sacred the world over in civilized and in savage countries. What commerce we have abroad receives little protection from our Navy, which is too small even to gladden the hearts of our countrymen by an occasional sight of the American flag.

Although we are on friendly terms with Great Britain and united with her by ties of kindred and numerous interests, yet war is possible even with that great naval power. On two occasions since 1862 we have been on the verge of a war with England, once on account of the Trent affair, and again when the Alabama claims were pending. The fishery question has offered some disagreeable points, and we can never tell what questions may arise to jeopardize the peace of the two nations.

The commercial marine is the life of Great Britain, and the nation has never hesitated to go to war when it seemed to suit the interest of her commerce to do so. When her commercial prestige is in danger of being impaired she is likely to preserve it by going to war, without regard to expense, and sometimes without regard to justice. This has been the policy of England for centuries, and she might find reasons even for involving us in war with her. The war of the rebellion threw a large portion of our commercial marine into her hands, our ships taking safety under the British flag to obtain that protection we were unable to give them, and this state of things will again happen if we become involved in war with any power that could afford to fit out steamers that could overtake our commerce on the high seas. Our civil war and the ravages of two or three small Confederate cruisers threw over one-third of our commerce into British hands, reducing us from 5,000,000 to 3,000,000 of tons, and increasing the tonnage of Great Britain from 5,500,000 to 9,000,000 of tons, of which about 7,600,000 was registered tonnage. This peaceful transfer of our commercial marine to the British flag did much towards keeping peaceful relations between the two countries, for Great Britain might, on several occasions, have taken the opportunity to force *a war upon us* and thus become the sole carrier of that great trade which

ıcreased and multiplied in such an astonishing degree. Having for a me absorbed a great part of our tonnage on the ocean, and a great im-etus having been given to the steam tonnage by which she has covered ıe ocean with great steamers, England can afford to be satisfied with ıe present situation, but if we had obtained the commercial supremacy is doubtful if England would remain on good terms with us.

After all, we must admire the nation that leaves nothing untried to ıster the interest of its citizens in all parts of the world, even although ıeir statesmen are ready to do injustice to others. It is perhaps only ıe natural right one nation has over another that has failed to improve s opportunities.

Who that has seen the British navy in all its power and pride does not onor the spirit which has made it the most formidable in the world om the time of Queen Elizabeth? What is to prevent the American eople from following in the footsteps of the British and building up navy, on which our power as a nation and the success of our commerce epend? I do not hesitate to assert that had we kept up our Navy to ıe standard of our once rapidly increasing mercantile marine, we would ave to-day nearly as many merchant vessels upon the ocean as Great ritain. Our merchants lost heart when during the civil war they saw the overnment doing so little to stop the ravages of two or three inferior onfederate cruisers, sending vessels in pursuit that could not catch ıem even if they saw them. With all our Navy we had not a vessel hat could catch the Alabama until she offered herself up to be captured.

The most expensive and least effectual way of building up a navy is o wait until war is actually declared. The state of affairs has changed ince 1812, when Perry in a month or two built and equipped a fleet on ake Erie with as much celerity as the English, and a preponderance f one or two small schooners over the enemy gave him the command f the lakes. Nowadays it takes two years to build an effective com-ıerce-destroyer, and at least a year to build a ship of ordinary size, al-hough twenty could be built at the same time as well as three or four.

When I speak of our unprotected coast, I refer to our lake coast as ell. The commerce of our great lakes is unprotected, and no steps re taken to remedy this state of affairs. In this quarter the only ation we should ever have to contend with would be Great Britain, hose territories face our own, and where we can shake hands across he border. In case of war between Great Britain and the United tates it would be comparatively easy for the former to get possession f all the lakes, and with her powerful navy lay our cities under contri-ution or destroy them. It is foolishly said that in case of war with reat Britain all her lake and Canada commerce and Canada itself will ll into our hands, as if that would compensate us for the destruction f our trade, the plunder of our coasts, and the lives of our citizens. he worst thing of all would be the humiliation of the American people ı having to submit to whatever terms our enemy chose to impose pon us.

It is generally imagined that we have practically possession of the ıkes, and that in a few hours we could land a sufficient force on the pposite shores to overrun Canada. Even if that were possible, "the ame would not be worth the candle." But let us consider how the mat-er really stands.

Canada has been engaged for some years in widening and deepening he Welland Canal, at a cost up to the present time of some $20,000,000, ıaking the width 280 feet, the locks 75 feet, and the depth 17 or 18 eet. The ostensible object of this enlargement is to introduce merchant

vessels of greater size and take grain directly from the lakes to Europe, the result of which would be to greatly diminish the lake commerce proper, now amounting to over 600,000 tons.

But there is another object in thus improving a canal on British territory, and that is to admit vessels of war upon the lakes. Here again we see the result of British statesmanship, which, while striving to extend its country's commerce, never neglects to provide means for its protection. When the Canadian canals are completed, heavy war vessels, temporarily lightened, can be carried through to the lakes, and war would hardly be declared before Lake Erie would swarm with British iron-clads and gun-boats, commanding all the shore of the lakes, even to Duluth. Under such circumstances what chance would there be of our crossing the lakes or marching an army into Canada except through the wilderness of Maine or around Lake Superior, with the risk of being cut off from our base of supplies, which might prove fatal to us.

This may be considered an extreme statement, but it is what would happen in case of war with Great Britain, who, although probably not valuing Canada as highly as the Canadians themselves, would leave no efforts untried to hold the country.

For this reason we should pay proper attention to our defenses on the shores of the great lakes. The dangers threatened here appeal directly to our representatives from the West. The Western people are supposed to be indifferent to the increase of our Navy, considering themselves secure from the attacks of a foreign foe, but if they should see all the American vessels on the lakes destroyed or captured, they would realize too late the necessity of defending the vast interests we have in that quarter.

After the war of 1812 we were limited by treaty to keeping a single vessel of war upon the lakes, carrying only one gun, and the English were bound by the same rule. This agreement was virtually ignored by Great Britain during the Fenian troubles in 1865–'66, when three gun-boats passed the Welland Canal, not then deepened, into Lake Erie for the protection of the Canadian coasts, and these vessels lay before Buffalo, menacing the Fenians, who, in their zeal to invade a peaceful country, never dreamed of having to encounter British vessels of war, ready to cut them off on their first attempt to cross into Canada. That incident did more toward arresting the Fenian invasion, which it was the duty of our Government to have suppressed, than any authority we could exert. We had no gun-boats, and our solitary Government steamer, which is little better than a tow-boat, was probably engaged at the moment in hauling some vessel out of the mud, or else her engines were out of order!

Since that time the treaty has been looked upon as a dead letter, and, if I remember rightly, our Government notified Great Britain of its desire that the compact should terminate. At all events, the fact that the English had three gun-boats on the lakes in 1865–'66 relieves us from further adherence to the treaty, and there is no reason why we should not commence to build on the lake shore one or two of the heaviest iron-clads (with powerful guns) of good speed and impervious to the heaviest shot. There is every facility for constructing such vessels on Lake Erie, and one such ship stationed near Buffalo could, in case of threatened hostilities, drop down to the mouth of the Welland Canal, and with shot and shell demolish the entrance docks, &c., rendering the work useless for naval or military purposes. Even should a vessel succeed in passing the canal, she would be immediately destroyed. I *would* recommend that one of the proposed iron-clads be built on Lake

Ontario, and kept on the stocks ready for launching in case of necessity. It is much easier to build iron-clads for the lakes that will bear the heaviest weight of iron in those comparatively smooth waters than it would be to build similar vessels intended to operate on our stormy coast.

What I have said with regard to the dangers on the lakes may be considered hypothetical, but it is the part of wisdom for a nation to prepare against any contingencies.

England is the only nation with whom we have ever seriously gone to war upon the ocean, and although the English and ourselves have a common origin, speak the same language, and live under similar laws, these circumstances, which should cement our friendship, seem to be no barrier to misunderstandings which are liable to lead to deplorable results.

Great Britain does not hesitate to advance claims for infractions of her rights, knowing her power to enforce them, while we are always ready to resist any invasion of our rights, without any power to enforce anything. A nation as sensitive as ours, and always impatient to rush into extremities when we consider our rights invaded, should at all times be prepared for offense and defense, or at least we should take the necessary measures to keep enemies out of our ports and prevent our great cities from being laid waste.

It is a great humiliation for a nation, after passing through an expensive and destructive war, to be obliged in the end to pay all her enemy's expenses, either in money or cession of territory, besides losing all her commerce and having it added to that of her adversary. But these are terms which conquerors sometimes impose, and we have an instance where Germany required France, one of the most powerful nations of Europe, to pay all the expenses of the war between the two countries.

It has been shown by the present able Chief of Engineers, United States Army, how deficient we are in coast defenses, particularly in heavy rifled guns, which we seem to be able to make only in such small quantities that it would require a century to supply our necessities from our own foundries. As our military works are so inadequate for the defense of our coasts and harbors, we should, while building cruisers, proceed with the construction of iron-clads of the monitor type, which I consider the best vessel for coast and harbor defense. No forts can hold their own against an attack of heavily armored vessels without the support of iron-clads. This was demonstrated during our late civil war, where powerful forts succumed to wooden ships and smooth-bore guns. What vessels we build should be the best of their class in endurance, speed, and the character of their guns. The few small iron-clads we now possess may be fit to co-operate with forts or help to keep an enemy's gunboats out of small rivers or harbors, but their presence would not count for much in time of war. The few larger iron-clads that we propose to finish would perform good service as far as their limited numbers go. After all, they will carry but a small number of guns, and would offer but temporary resistance to a powerful enemy. We should build two or three of these vessels yearly, and should continue building them until the general voice of the Navy proclaims their number sufficient to give ample protection to our coast.

We appropriate large sums for the improvement of rivers and harbors, and public buildings of all kinds, yet in regard to the Navy our Government has been the most short-sighted and sluggish of any in the world. At times when aroused to great effort we have achieved important results; but after building some ships, which went to decay in a few years, we have relapsed into a deeper slumber than ever. A navy which cost millions, and might have kept on increasing, had to be

pulled to pieces and thrown into the scrap heap with greater rapidity than it was built.

The situation has entirely changed since all the world built wooden ships. Now iron is king, and in beginning to build a new navy we necessarily throw aside the old wooden vessels, as England and France did their splendid three-deckers when the battle between the Monitor and the Merrimack taught them that wood was no longer suitable for ships of war. These nations hesitated no more than would the average man to discard an old coat when the fashion changed.

It is all very well for the United States to grow rich and prosperous with commercial resources far ahead of all the world, but what is the use of it all if the people are unwilling to provide proper defenses? One year of war without our being able to strike an effective blow would cost more than it would take to build half a dozen navies like that of Great Britain, and such a war could easily be averted by making even a moderate show of preparation.

TORPEDOES.

Much stress is laid by military authorities on the security against an invasion that will be afforded our ports owing to the preparations we have made to defend them by torpedoes. I claim to understand thoroughly the effect torpedoes will have on a naval power. I have had experience in that kind of warfare, and can truly say that although torpedoes have considerable moral effect, yet they never prevented any expedition during the late civil war. The Confederates used them by the thousand in rivers and harbors, and even on the open coast. They had as great a variety and as dangerous kinds as we have to-day, with excellently drilled men to manage them. I have seen hundreds of these torpedoes taken up without loss under a heavy fire as the ships advanced, and such will always be the case when an enemy has a powerful fleet under the guns of which boats and divers can be protected from the fire of forts or from the attacks of gun-boats sent out to interfere with those operating against torpedoes and torpedo mines.

In these days, when men can stay under water five or six hours at a time, and when the electric light can be used to illuminate the bottom, it would not be a very difficult matter to make torpedoes powerless against the passage of a fleet, unless the party on the defensive is also supported by powerful vessels that can operate under the protection of its forts and cut off and destroy the enemy's divers and small boats.

Torpedoes properly planted on the bottom are powerful adjuncts to a proper force in preventing an enemy's passage into a harbor or up a river, but in this kind of warfare torpedo-boats are particularly necessary to drive off ships or to meet the torpedo-boats of an opposing force. Every foreign iron-clad of any size carries from two to four torpedo-boats of from 50 to 60 feet in length, of great speed, and very formidable.

While we are mapping out a system for our Navy we should commence at once to build a class of torpedo-boats 100 feet in length that could not only help to protect our harbors, but could also operate off our coasts in moderate weather, for no torpedo-boats or torpedoes will be found very effectual in rough weather. The moral effect of such vessels will far exceed that of any submerged torpedoes. We could build strong iron vessels of this class which would last many years, and would make, with the Herreshoff coil and engine, 20 knots an hour, and be impervious to Hotchkiss shell and mitrailleuse. We should build at

least fifteen such boats at once, and their cost would be moderate. You can scarcely enter a fitting-out port of one of the great powers where you will not see a number of these torpedo-boats steaming around, practicing on dummies prepared for the purpose, and showing their readiness at all times for action the same as if the nation was at war. They are considered as necessary for the defense of a harbor as forts or iron-clads.

While we are provided with a torpedo station and school where the elementary principles of this kind of warfare are taught, the school has never yet been provided with a proper torpedo-boat, by means of which officers under instruction could put in practice the theories they were acquiring, although no officer can be thoroughly instructed in torpedo warfare until he has had experience in the management of torpedo-boats. The most that the students at the school have probably seen is a decrepit old steam launch with a wooden bar stuck out in front, a method in use more than twenty years ago, and offering neither the certainty nor security of a properly constructed apparatus.

The explosion of the torpedo is apt to fill such a boat with water, rendering her powerless to escape from the enemy. This was the fate of the launch operated by Cushing against the Albemarle, and she was a better boat than any I have ever seen since in the Navy, and used comparatively a small charge of powder. No ordinary steam launch or tug would serve, as many people seem to think, the purpose of a torpedo-boat for harbor defense. Such a torpedo-boat must not only be large enough to fire a heavy charge of gun-cotton from a properly devised spar of wood or iron, have speed enough to escape from an enemy if pursued, and be impervious to Hotchkiss and mitrailleuse guns; these vessels should also be large enough to carry and discharge from four to six motive torpedoes not weighing less than 550 pounds. Such vessels would be formidable, and no other description of torpedo-boat would be worth the expense of building.

THE MERCANTILE MARINE—ITS NECESSITY TO THE NAVY.

I have long looked forward to the time when Congress would take some steps towards resuscitating our mercantile marine, which has long been languishing for the want of Government action in its behalf. A large number of merchant steamships would in time of war be an important adjunct to our regular naval force, for many of them would, with comparatively little alteration, make the best commerce-destroyers in the world, and also the best destroyers of commerce-destroyers.

Two of the most formidable vessels of this kind in the Russian navy were built by Cramp & Sons, of Philadelphia, for the merchant service. They carry a large amount of coal and provisions, and, in case of necessity, could run away from the fastest cruisers.

If we ever succeed in building up a mercantile marine the Navy would feel assured that the vessels would obtain the best speed. We were the first nation to build large and fast steamers, and would not feel satisfied until we had outstripped the best vessels now afloat.

It is only necessary to glance at the list of fast merchant steamers belonging to England, France, and Germany to see what an influence they must exert in a war with a commercial nation. England alone would cover the ocean, with the aid of her coal mines, as she did formerly with her canvas, and commerce-destroyers of other nations, unless they had great speed, would be gathered in with perplexing rapidity. There is no part of the world where the British flag does not float over some fast and powerful steamer, all ready in case of necessity to be con-

verted into a ship of war, and after receiving her commission and guns, with a trained crew, she would be ready in a few weeks to go forth on her mission of destruction. Many of these British steamers are running to our own shores, and we pay them a yearly tribute of $130,000,000 for carrying our produce and passengers to Europe. Great Britain, by giving every possible encouragement to her commercial marine, adds enormously to the strength of her navy in time of war, and makes her ocean steamers not only their own protectors, but the destroyers of her enemies. This great fleet of steamers has been built up by subsidizing the lines until they are able to do without such assistance.

No wonder Great Britain has become the great commercial nation of the world, and made all other nations pay tribute to her for carrying their products. Her statesmen do not raise the cry of "taxing the people" when asked to assist some proposed steam line to enter upon its career. They do not waste precious time in investigating matters which should be plain to the commonest understanding, but are ready to spend a million of dollars so that twenty millions will flow into British coffers. Instead of taxing our people by subsidies, "we are making them lose over three hundred millions a year in the last ten years." (See Secretary Frelinghuysen's letter on the commerce of the world.)

From 1872 to 1882, British imports were $18,363,340,000; exports, $13,566,661,000; showing a balance of trade against her of $4,796,670,000, three times the amount of our national debt. We have paid a large share of this bounty to British mechanics, and not a dollar of it has remained in this country. The position we hold in the carrying trade of the world is simply humiliating; it is absolute dependence and subservency; and we lose by it a large fleet of fast steamers that would equal or exceed for many purposes in time of war any that we could build in the Navy.

The first step to be taken to remedy these evils is to establish a Government Board of Trade, to represent the wants of our commerce and make such recommendations from time to time as would tend to bring our commercial marine to its proper standard, enabling us to carry a large share of our exports and imports. This Board of Trade should be connected with the Navy Department, and the Secretary of the Navy should have supervision over all ocean steam lines, to see that their vessels were constructed with proper strength and swiftness to render them capable of conversion into ships of war.

There would be no necessity for subsidizing our lines of steamers further than by paying them a liberal compensation for carrying all our mails; so we would hear no more of the cry of "taxation" which is raised by British lobbyists every time Congress makes any attempt to revive our commercial marine. This cry of "taxation" might be urged with far more force against our tariff, which is imposed to protect our home industries, and which is ten times more onerous than any subsidy ever likely to be given to our steam lines.

If it was not for her great ocean steam lines, Great Britain would require ten times the number of vessels in her navy that she has at present, for her coast must be defended against all Europe, and her mercantile marine protected, no matter what the expense. She extends her arms over it as a mother would over her children.

In 1849, when the great exodus to the California gold mines took place, Congress, seeing the great advantages of such a course, established a line of mail steamers from New York to the Isthmus of Panama, and thence to San Francisco, stopping at intermediate ports. There was no hesitation in appropriating a large amount of money for carry-

ing the mails. Congress did not consider it a subsidy, for the country received in return twenty times the value of the amount expended on these steam vessels. I myself commanded one of the mail steamers, and during three years carried about 36,000 passengers and $82,000,000 in gold. But for that action on the part of Congress, no company could have afforded to start such expensive ships. The British would have absorbed all that trade, and the profits would have gone to Great Britain, not to the United States. The result of that action was, we held that line of steamers and others until the Pacific Railroad was built, and for once in our lives we kept a trade exclusively American in our own hands. There were no British ships in competition at that time, or we would have heard the same outcry against "subsidies" from American agents of foreign steam lines, who fear the competition of our countrymen.

Who can overestimate the importance of those steam lines to California? We gained actual possession of a great country, with its enormous wealth in minerals. Within a year a great city sprang from the barren hills as if raised by an enchanter's wand, and the wealth of California has made our Eastern cities grow and prosper in a manner that the world has seldom witnessed before.

Think what a vast amount of money has been paid to Englishmen in the last ten years merely for carrying passengers and produce across the Atlantic—at least one billion three hundred millions of dollars! The interest alone on that amount would have made us the greatest naval power in the world. But we are told the people do not desire the United States to be the greatest naval power, that we want "a small but efficient navy." Now, in the absolute sense of the word, a small Navy cannot be an effective one. A navy must be large in proportion to what will be required of it—protection to commerce in all quarters, and strong enough to take the initiative—and this is what we will have to look squarely in the face some time or other, perhaps when the sight may be the reverse of pleasant. It is all very well to boast of our corps of highly educated officers, so essential in case of war. I admit their excellence, but think we cannot do much with them if we have only a few torpedo-boats improvised from the towing craft about our large cities. When we do build ships we should be careful to take advantage of the numerous and costly experiments that have been made in Europe. There have been enough of them in the last fifteen years to satisfy anybody's curiosity. The English, French, Germans, Russians, Austrians, Italians, and Turks have each developed great ships of all kinds, and though some of these may not fulfill the expectations of their constructors, yet they are all built on well-tried principles. We cannot teach Europeans anything in that direction, but by observing their experiments closely we ought to build as good vessels as they can. We have been crying for years, "Wait until Europe finishes her experiments with ships and guns, and then let us take advantage of her experience and build a better vessel than any abroad." Well, the Europeans have about finished their experiments, and are well provided with powerful vessels which seem to bid defiance to the elements, and with fast cruisers that can go round the world if necessary without using coal.

I paid a visit this year to West Point, where I desired still further to investigate the system of education which has so challenged general admiration and see wherein existed the superiority over the Naval Academy.

The Military Academy at West Point stands to-day, as it did in the time of Colonel Thayer, its most distinguished Superintendent, the foremost

institution of its kind in the world. Like a house well built on a firm foundation it has stood the test of time, and to-day shows no signs of deterioration. Organized originally on a good system that has never been tampered with, the Military Academy has gone on and prospered, educating officers, who in time of need became commanders equal to any in the world.

Could the Confederates have obtained the services of all the graduates of West Point then living at the outbreak of our civil war, they would probably have gained their object; had we possessed them, we could have terminated the war in ninety days. Such is my opinion of West Point.

The discipline of the institution is excellent, and its rules as unbending as the laws of the Medes and Persians, yet the iron hand is concealed by a velvet glove, and there is nothing done to harass or mortify the cadets, who appreciate the benefits conferred upon them by the Government.

This condition of affairs differs widely from that which lately existed at the Naval Academy, an institution in which I have ever taken a warm interest, not only from having been its Superintendent for four years, but from the great benefit it has conferred on the Navy.

I attribute much of the success of the West Point Academy to the fact that its rules and regulations have had a character of permanence. They are never altered by the Superintendent, except after careful consultation with the Academic Board. The matter is then referred to the Secretary of War, who makes his decision after consulting with the inspector, so that no change is made without due deliberation, and there is little danger of the rules being tampered with. Under these circumstances and a Superintendent well suited to the place, which the War Department takes care to provide, the rules are so fixed that the institution moves on like clock-work. When occasion has occurred, as was the case a few years since, an appeal to the good sense and honorable feeling of the cadets seems to have remedied the evil.

There is another reason why discipline and harmony are better observed at West Point than at Annapolis. When a cadet enters West Point he feels sure that if he exerts himself properly he will at the end of his course receive a commission in the Army, and that his time and study will not be in vain, but will have fitted him for the career of his choice. He does not expect to go from the Academy into civil life with a military education and training, which, however excellent, have tended to make a civil career distasteful. Instead of feeling that his military education is finished, he sees ahead of him a continuance of studies if he would keep up with the progress of another profession. The result of this knowledge naturally makes the West Point cadet a more cheerful fellow than the cadet midshipman, in whose class of sixty members only ten can hope to receive commissions in the Navy.

I think this state of affairs will account for the difficulty in maintaining discipline and harmony at Annapolis.

In my opinion, also, we are not always careful enough in appointing a Superintendent of the Naval Academy, who should not be chosen for some particular good quality he may possess, but for the many qualities required in so important a position. I think we should avoid in future the numerous changes which have heretofore been made by Superintendents without the authority of the Navy Department. Superintendents should refer everything of a serious nature to the Secretary of the Navy. No matter what may be the qualifications of an officer in command at Annapolis, he should understand that he is simply an

executive, and directly responsible to a higher authority. At times the discipline of the Naval Academy has been extremely lax; then, again, it has been directed by too rigid a hand, evincing too much severity. A *juste milieu* is the best course, and while implicit obedience should be enforced, the hand of the Superintendent should, as far as possible, be parental. The errors of youth, where they are not criminal, should be dealt with as leniently as possible, and nothing should be done to degrade those who are to hold the honorable position of officers in the Navy. If you take away self-respect from a young man, the disgrace may cling to him for life. At the same time, I am an advocate for prompt dismissal from any military or naval institution where dishonorable conduct is proven, and a person so expelled should not be eligible for reinstatement under any circumstances. These remarks apply to myself as well as to any one else. I remember some events which occurred during my administration at the Naval Academy where unnecessary severity was dealt out, and I must say I always found the wholesome interference of the Department in these matters beneficial to the Academy.

I received every honor and courtesy while at West Point from the Superintendent and all the officers, and this was the more gratifying to me inasmuch as I am aware that the higher officers of the Army, men who have seen years of brilliant service, do not always receive at naval stations the honors to which they are entitled. I have known cases where even the General of the Army was received without the proper honors at a naval station. This may have arisen from misconstruing an Army regulation which had no reference to officers of high rank visiting military and naval posts, but the regulations should be liberally construed whenever an Army officer of high rank visits *any* of our naval stations, since there is no courtesy that should not be extended to our gallant brothers in arms who have performed such services for our country. Abroad every courtesy would be paid to them, and I beg leave to suggest that you will examine the Army and Navy Regulations relating to this matter, and the controversies that have taken place on the subject, and endeavor to have it so adjusted that there will be no difficulty in the future for either arm of the service to decide what is due in the way of honors and courtesies to the other.

ERICSSON'S TORPEDO.

Since writing the above remarks I have made some inquiries in relation to Ericsson's torpedo, and understand that Mr. Ericsson has so perfected it that in my opinion it is the most formidable torpedo now in existence. It can be operated against a vessel of war either in smooth or rough water, and a number of Ericsson's torpedo-boats would be a powerful adjunct in protecting our coasts and harbors. While the Government is paying attention to other torpedoes it should not neglect this most valuable invention. I am informed that Mr. Ericsson has planned a torpedo-vessel of good size which can keep the sea for ten consecutive days in any weather. Such vessels would go far towards breaking up any blockade of our coast. Ericsson's torpedo could be applied to any gun-boat we may build and even to large vessels.

I have the honor to remain, very respectfully, your obedient servant,

DAVID D. PORTER,
Admiral.

Hon. WILLIAM E. CHANDLER,
Secretary of the Navy.

REPORT OF THE CHIEF OF THE BUREAU OF ORDNANCE.

BUREAU OF ORDNANCE, NAVY DEPARTMENT,
Washington City, November 1, 1883.

SIR: I have the honor to submit the annual report of this Bureau, and also to transmit estimates for the fiscal year ending June 30, 1885:

1. Fuel, tools, material, and labor, small arms, and machine guns, and machine tools	$453,210 00
2. General repairs, and a new iron powder-boat	15,800 00
3. Freight and miscellaneous expenses	3,000 00
4. Civil establishment at navy-yards	12,234 50
5. General expenses of the torpedo station, and purchase of a torpedo-boat, &c	105,000 00
6. To complete the ordnance outfit of the four new steel cruisers	449,027 00
7. To supply the ordnance outfits of the monitors Puritan, Terror, Miantonomoh, Amphitrite, and Monadnock	1,073,000 00
8. For modern guns, carriages, and ammunition for the rearmament of the Navy	599,400 00
Total	2,710,671 50

ORDNANCE.

The work of preparation of type guns of high power has progressed as fast as the very great difficulties encountered in procuring a proper quality of steel would admit.

Of the forgings ordered in the preceding fiscal year, only two sets have been received of quality suitable for making guns, and these have been taken in hand at the ordnance department of the Washington navy-yard, and pushed on as fast as possible. These guns are of 6-inch caliber, and will represent the hooped and the wire-wound systems. The former will be completed very shortly, and with it will be settled all questions of kind of powder, weight of charge and projectile for the Navy 6-inch guns.

The Bureau was not so fortunate with its orders placed in the United States for the manufacture of tubes for 8-inch guns, the steel-makers in our country not having thus far been able to deliver any forgings of this size. There is some prospect, however, of one being received ere long, and if it passes inspection more can probably be obtained.

In the meantime, with the assistance of a gun (designed by the late Commodore Jeffers) which the Bureau has lengthened to 30 calibers, very important progress has been made towards the determination of the character of powder suitable for use in the 6-inch and 8-inch calibers. Through the exertions of Lieut. Commander William M. Folger, in charge of the naval experimental battery, a class of powder has been about perfected, which gives very gratifying results in the gun above mentioned, and there seems no reason to doubt that it will be entirely successful and satisfactory in the bore of the regular service 6-inch gun behind 100 pounds of shot.

The pressures thus far obtained are very moderate (not exceeding 15.2 tons per square inch), and the velocities are high, 2,093 feet per second.

With such results already attained, the Bureau feels no apprehension concerning the powder for 6-inch and 8-inch guns, and this in itself is a great step toward success.

Standard drawings having been prepared for service high-power guns from 5-inch to 10½-inch caliber, the Bureau has been enabled to order forgings for the battery of the Chicago, and these are now being manufactured. If they prove to be of suitable quality, the machine finishing will be undertaken at once.

As was predicted, very considerable delay has been experienced in the production of forgings, and it was found necessary to order those for the 8-inch guns from abroad.

The attempt to obtain a suitable quality of high-grade wire for winding guns has been attended with very great difficulty and delay. Such wire has not been manufactured in this country, and offers great difficulties at the commencement. The matter is still pending, as the Bureau has not yet been able to find a firm which can certainly execute the work. It is believed, however, that progress can be made in this direction ere long.

The determination of a suitable model of carriage for the high-power guns has engaged a great part of the Bureau's attention, and several forms have been tried, all with good success. It is found possible to check the recoil of the 6-inch gun now at the experimental battery within about 14 inches, and that is less than would be judicious in service. There is no doubt of the production of suitable and strong carriages.

Experiments have been commenced with steel armor-piercing projectiles, both forged and unforged. Varying results have been obtained, the best being the performance of an unhammered cast-steel 6-inch shell, which passed through 10 inches of iron, backed by 20 inches of oak and 12 feet of earth, being upset only one-tenth of an inch. This was considered quite successful for a new branch of manufacture.

The Bureau has ordered two experimental compound armor plates (from two celebrated Sheffield firms), and will use them in grading and determining the qualities of armor-piercing projectiles.

At the ordnance department of the Washington navy-yard the Bureau has inaugurated a course of practical instruction for seamen gunners.

The course embraces the preparation of ammunition, mechanics, carpentry, and laboratory work, and it is hoped that it will be effective in increasing the usefulness of such of our young seamen as select the ordnance branch for a specialty.

MONITOR TURRETS.

A great deal of attention has been given to designs of monitor turrets, and several have been perfected which it is thought will unite the advantages of moderate size, sufficient interior space and convenience for manipulating the guns.

The carriages and internal gun fittings have been considerably advanced, and all these designs are in a sufficiently forward state for the present.

MACHINE GUNS.

The three Hotchkiss revolving cannon of 47^{mm} ordered last year have been recently received, and will be soon put afloat. Of course many more machine cannon are needed, as the number carried by ships of war is constantly increasing.

The Bureau has ordered from Mr. Hotchkiss two single-shot anti-torpedo guns as types of this class; one is to be a 6-pounder and one a 4-pounder. These pieces are coming prominently forward at present, and will probably form a very efficient part of the defense against automobile torpedoes, and will be much employed in engagements between ships, as they have high ballistic power. The piece (securely pivoted) is fired from the shoulder, no recoil being allowed.

Experiments with volley fire from Gatling guns (referred to in the last report) have been pursued, and considerable light has been thrown

on the behavior of this gun at sea. More extended trial and constant practice is necessary in order to develop its true value afloat and assign them their proper place in naval armaments. A new and improved feed for this gun has lately been devised by the company.

SMALL-ARMS.

Magazine small-arms are still in a state of transition, and new models and devices are constantly coming forward. What is called the "left-hand movement" for loading and extracting is now being developed, and as it adapts itself to the easiest and most natural movements of the arms and hands, increased rapidity and facility of manipulation will result.

No military rifles of the kind are yet on the market, but it is probable that they will be soon. The Bureau is observing all changes and advances that take place in these matters.

ELECTRIC SEARCH LIGHTS.

During the year the Bureau has been able to order a few of the celebrated Mangin projectors from Messrs. Sautter, Lemonnier & Co., of Paris. One of these powerful lights (of the largest size) will be sent to the torpedo station for the purpose of experiment and instruction, and the others will be equipped with dynamos and engines and issued to the service. They are considered to be a powerful factor in defense against torpedoes, and are also very useful for a variety of military purposes on shipboard.

TORPEDOES.

Since the last report experiments have been continued at the Washington navy-yard on the rocket torpedo, and some experience has been gained.

In pursuance of the intent of an act of Congress passed during the last session, concerning a competitive trial of torpedoes adapted to naval warfare, notices were sent by this Bureau to the principal manufacturers of torpedoes both in this country and Europe. Replies from all of them are not yet in.

The importance of having a sufficient number of light and very swift boats from which to launch offensive torpedoes is well known to the Department, and it is suggested that Congress be again urged to appropriate for one to be purchased abroad, from one of the firms which has most experience in the building of such vessels.

THE TORPEDO STATION,

Under the energetic supervision of Capt. T. O. Selfridge, has given the usual amount of instruction to officers of the Navy, and the designing and construction of gun-cotton spar torpedoes for ships and boats has been successfully accomplished. This material will soon be put afloat as far as the store of gun-cotton now on hand will allow.

Work on the plant for manufacturing gun-cotton has been pushed rapidly forward, through the exertions of Captain Selfridge, and there is every prospect of the Navy being able soon to manufacture its own gun-cotton. We cannot overestimate the importance of this most useful explosive, and the Department is to be congratulated upon having introduced its manufacture for military purposes into this country.

I am, sir, your obedient servant,

MONTGOMERY SICARD,
Chief of Bureau.

Hon. WM. E. CHANDLER,
Secretary of the Navy.

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REPORT

OF

THE SECRETARY OF THE INTERIOR.

DEPARTMENT OF THE INTERIOR,
Washington, November 1, 1883.

SIR: I have the honor to submit my second annual report of the operations of the Department of the Interior, and in so doing to renew many of the suggestions and recommendations of my former report, together with such others as in my judgment will promote the public interest.

INDIAN AFFAIRS.

The report of the Commissioner of Indian Affairs shows that there has been a very considerable improvement among the various Indian tribes, with but little dissatisfaction and but one outbreak, and that among the Apaches of Arizona. It is believed that it is quite possible, with a wise and judicious treatment of the Indian question, to prevent the recurrence of hostilities between the Indian and his white neighbors that have marked nearly every year of our history. The Indian can no longer hide himself in the fastness of the mountains or in the solitude of the wilderness. Contact has come between the settler and the Indian in all parts of the country. Civilization and savagery cannot dwell together; the Indian cannot maintain himself in a savage or semi-civilized state in competition with his white neighbor, and he must adopt the "white man's ways" or be swept away by the vices of savage life, intensified by contact with civilization. Humanity revolts at the idea of his destruction, yet it is far better that he should disappear from the face of the earth than that he should remain in his savage state to contaminate and curse those with whom he must necessarily come in contact in the future.

It has been demonstrated that the Indian is capable of advancement, although he has not reached a high state of civilization, except in a few individual cases. The progress of the Indians of the Indian Territory and New York, as well as some other sections, not only demonstrates his capability but also affords convincing proof that the race is not to die out, but has the inherent strength to maintain itself, even under

quite unfavorable circumstances, and that with intelligent assistance from the Government it may become self-supporting.

If the Indian is to become a civilized being it must be by the aid of the Government, intelligently directed; and one of the first steps to be taken is to fix the Indian in a permanent home. Civilization will come slowly, if it comes at all, to those who wander about without fixed homes, however well the Government provides for their wants. To this end the reservations should be reduced in size commensurate with the wants of their occupants, and a fee-simple title thereto given to the tribe, to be held for the benefit of the members thereof, according to Indian polity, until such time as the Indians themselves shall choose to divide it. The surplus lands of such reservations should be bought by the Government, and parceled out to actual settlers only. The proceeds of the lands so sold should be used, not in providing food only for the Indian, but in the purchase of stock, farming implements, and in the education of their youth. When the Indian is fixed in his home and understands that he has a title to his land of which he cannot be deprived, one great source of his discontent will be gone.

The destruction of game in the country renders it impossible for the Indian to continue to support himself by the fruits of the chase, and he must support himself by labor or be supported by the Government. If supported by the Government, he will be a pauper and a vagabond, an expense to the nation, and a curse to the people among whom he may dwell. His evil influence will be felt far beyond the neighborhood in which he may live. He has no claims on the Government for support beyond the time when he has acquired the ability to support himself. If the Government has purchased his land, he should be paid for it according to the contract, having, however, due regard to his interest. If the system of annuities provided for in many of the treaties will keep him a savage pauper, payments should be made to him in such a way as to save him from such a state. He will not advance if the Government supplies all his wants and demands nothing from him; and no greater injury can be done him than to supply his wants and allow him to live in idleness. If allowed to continue in idleness, he will continue in vice and savagery. He must be taught to labor and care for himself, by persuasion if possible, by compulsion if necessary. The Government should provide schools for his children, where they should be taught the English language, and all kinds of useful labor; and the attendance of all children of school age should be required. If he chooses to be a farmer, he should receive suitable assistance in the first instance, with the understanding that such assistance is only temporary and must soon cease. If he prefers to be a stock-raiser, as he will in most cases, he should be furnished stock suitable to his wants, instructed to care for them, and then left to his own exertions. The manual-labor schools should instruct the male children in labor on the farm and in the shops, and the females in household affairs. Oppor-

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It has been demonstrated that the Indian is capable of advancement, although he has not reached a high state of civilization, except in a few individual cases. The progress of the Indians of the Indian Territory and New York, as well as some other sections, not only demonstrates his capability but also affords convincing proof that the race is not to die out, but has the inherent strength to maintain itself, even under

and that if he fails to show reasonable progress in that direction such support will be withdrawn. It should be within the power of the Department to withhold such supplies, except in payment for labor performed by such Indians when the Department can furnish them an opportunity to labor. The cultivation of land or the care of stock should be made a condition precedent to receiving aid from the Government, except in the case of those unable to perform such labor. Such has not been the practice of the Government, but, on the contrary, the Indian has been allowed to refuse to do work of any kind, and yet demand and receive support from the Government. Why should the Government support the able-bodied Indian who refuses to work, any more than it should the white man who refuses to exert himself for his support?

I therefore recommend that all appropriations of the character named—that is, those made without consideration on the part of the Indians—be placed at the disposal of the Department, and that their distribution be made to depend as far as practicable on the disposition shown by the Indians to become self-supporting.

In my former report I recommended the disarming of the Indians, and I renew that recommendation. If we subsist the Indian, he has no use for fire-arms, and it is not economy to allow him to retain his arms for the purpose of supplying himself with game; far better to give him a sufficiency of food, and require him to remain on his reservation. If the Indian is disarmed he will cease to be an object of terror to his white neighbor, and the friendly relations that ought to exist between the white settler and his Indian neighbor will not be wanting. It is unsafe to trust an Indian with a gun; the very possession of it incites in him a desire to use it. The unarmed Indian is as safe in any country as the unarmed white man; it is the possession of his weapon and the knowledge that he may be tempted to use it that creates hostility towards him on the part of the settler. Disarm him and put him under the protection of the law, and his person and property will be as safe as that of his white neighbor. His arms ought not to be confiscated; for every rifle give him an ox of twice its value to till his field, cows, sheep, or horses, as he may need. The propriety of doing this cannot be doubted; the beneficial results would be readily seen. I renew the following suggestion made in my former report:

> I therefore suggest that the Commissioner of Indian Affairs be authorized to adopt some system of disarming the Indians, and to that end to purchase the arms of the Indians on fair terms, and that suitable appropriation be made, out of which payment shall be made, and that the sale of arms or ammunition to Indians holding tribal relations be prohibited under severe penalties.

INDIAN EDUCATION.

The subject of Indian education has lost none of its interest since my former report; on the contrary, an increased public interest has been

aroused concerning the duty of the Government in this behalf. The success attending all efforts in that direction, whether put forth by the Government or through the aid of charitable persons and associations, is most encouraging. The fact that the attempt to educate the Indian is not confined to a knowledge of books, but that the effort is being made to give him a practical education that will enable him to supply his own wants by his own labor, has won to the cause of Indian education many who saw but little advantage to the Indian in a literary education alone. The appropriations last year for the education of Indians were far below the actual wants of the service; yet I am able to report a great improvement in the condition of Indian schools, an increased attendance of pupils, and an increased interest among the Indians, both adults and youths. The Department located an Indian school at Lawrence, Kans., to be conducted on the plan of Carlisle, Hampton, and Forest Grove. The citizens of Lawrence donated to the Government for the purposes of this school 280 acres of choice land in the immediate vicinity of the city, of the cash value of something over $10,000. The buildings are now in course of construction, and when completed will accommodate about 340 children. It is desirable to increase their capacity to 500. The contract price for the buildings is $45,000. The superintendent of Indian schools reports the school buildings of Chilocca, Ind. T., and Genoa, Nebr., as about ready for occupation. The capacity of each of these schools is 150. It will be economy to increase their capacity to 400 each. In addition to the above, it is proposed to establish boarding-schools at Devil's Lake, Rosebud, and Sisseton, Dak.; Washakie, Wyo.; Wichita, Ind. T.; and Siletz, Oreg. Some of these are in course of erection. Ten new day schools have been established during the fiscal year. The capacity of the boarding-schools now established, including Carlisle, Hampton, and Forest Grove, is 5,025, and of the day schools 4,000, making the total 9,025. The capacity of boarding and day schools, old and new, is about 11,000.

In my former report I urged the necessity of putting at least one-half of the children of school age in *manual-labor schools*, and keeping them there until they should be sufficiently instructed in the industrial arts to support themselves. It has been demonstrated during the last year that even more than that proportion of the children can be put in manual-labor schools, if suitable appropriations are made for that purpose. Accommodation should be provided for at least 10,000 children in addition to those now in manual-labor schools, which would secure to about one-half of the children of school age the advantages of at least a partial education, while under present appropriations only about one-fourth have any school advantages at all, three-fourths growing up in ignorance and vice. If it is wise to educate one-fourth, it is difficult to see why it is not wise to educate *all*. Certainly this ought to be done, unless the expense is too great for the Government to bear.

In my former report I endeavored to show that such expense was within the true principles of governmental economy, in the following manner:

The care, support, and education of 10,000 Indian youths during the fiscal year 1884 ought not to exceed $2,500,000, and with the increased number of children there ought to be a reduction in the cost, and the expense of 20,000 children ought not to exceed $4,000,000 per annum. To the 20,000, costing annually $4,000,000, ought each year to be added not less than one-fourth that number, which, at the same expense per capita, will necessitate an additional appropriation of $1,000,000, and the account will stand thus:

10,000 children, fiscal year 1884, computing the cost at $250 each	$2,500,000
20,000 children, fiscal year 1885, at $200 each	4,000,000
25,000 children, fiscal year 1886, at $200 each	5,000,000
30,000 children, fiscal year 1887, at $200 each	6,000,000
25,000 children, fiscal year 1888, at $200 each	5,000,000

The per capita allowance is greater than the cost at the agency boarding-schools, but these schools are not kept up more than nine or ten months, while this estimate is for attendance for the full calendar year.

At the close of the fiscal year 1887 10,000 children, having completed their school course, can be discharged, leaving, with the 5,000 to be added for the fiscal year 1888, 25,000; 10,000 of these may be discharged at the end of the fiscal year 1888, leaving, with the addition of 5,000, 20,000 for the fiscal year 1889; and every year thereafter one-fourth of the whole number may be discharged and the like number added. Thus, at the end of the fiscal year 1888 there will have been discharged 20,000 children, who will be able to care for and support themselves; and the total expense of the education of this number with those remaining in school will not exceed $22,500,000, or about two-thirds of the amount of money expended for the suppression of Indian hostilities during the years 1864 and 1865.

Since 1872, a period of only ten years, the cost of Indian hostilities and military protection against Indians is estimated by the military authorities at $223,891,264.50, or an annual expense of $22,389,126.45. To this must be added the yearly appropriation for subsistence, which averages about five millions a year. To this must also be added the loss of life and the horrors of an Indian war, only to be understood by those who have had the misfortune to be participants in or witnesses of them. This cannot be computed in dollars, but ought to be considered in determining the policy of the Government in its dealing with the Indians.

I am confident that the expense per capita as above given is greater than necessary, and that if appropriations are made of the amount as above proposed, the number of children proposed to be kept in such manual-labor schools can be considerably increased. The total expense of the Indian service cannot be less than $5,500,000 annually, and such expense must increase instead of diminishing if the Indian is not made to do something towards supporting himself. He will do but little if he is left to himself, and if, forced by hunger, he does become a laborer, he will be without skill and only able to do menial labor requiring neither skill nor intelligence. His children will become beggars and thieves, adding to the expense of the country by increasing pauperism and crime.

The education of the Indian is demanded, not only in the interest of the Indian, but of the white people of the country, who are yearly taxed to support a class who by education can be readily transferred from the

list of non-producers to that of producers, and the public relieved from the burden of their support. Public sentiment will sustain liberal appropriations for a measure that promises to settle in a satisfactory way the "Indian problem," and answers once for all the question so often asked, "What shall we do with the Indians?"

Many of the treaties contain provisions for the support of a school for every thirty children. It is not desirable to establish a school for every thirty children; but as this provision was in most cases, if not in all, inserted in consideration of the cession of land, and thus must be considered not as a gratuity but a payment to be made, it appears to be the duty of the Government to expend in the education of such children a sum equal to the sum called for in such treaty. The cash value of such provision can be readily ascertained. A careful examination of the treaties has been made to see what amount was required yearly to fulfill such treaties, and the records of the Department have been as carefully examined to determine what amount has been expended under such treaties. The difference between what was expended and what ought to have been expended is the amount due the Indians each year, under such treaties. The sum of the years is the amount now due. I submit a table herewith by which it appears that the sum total required to fulfill such treaties amounts to the sum of $3,759,400 to the close of the fiscal year 1884, and this after deducting all sums for educational purposes on account of such treaties.

The estimates for school purposes submitted for the fiscal year 1885 contain an estimate for school-houses and one year's school under the treaties. The cost of such school-houses must come from the above amount, should Congress make the appropriation required, and still there would be due the Indians the sum of $3,256,400. This amount is guaranteed by treaty to be expended for educational purposes. It ought to have been expended in part each year, but the Government cannot avoid the payment of this sum simply because it declined to pay according to its contract.

These obligations are as sacred as the public debt, and every argument that can be used in favor of strict probity in dealing with the creditors of the Government can be used with reference to these obligations, and many reasons exist why these obligations should have had preference even of the public debt, but no excuse can be made for the failure on the part of the Government to comply with this condition of the treaties. With an abundance of money lying idle in its vaults, it is difficult to understand why so little attention has been paid to the pledges of the Government in this respect. The sum unpaid should at once be appropriated to be used for educational purposes, including stock, farming implements, tools, &c., for manual-labor schools. With this sum at the disposal of the Department, there can be but little difficulty in establishing schools among these tribes adequate to their wants.

Statement showing amounts which should have been appropriated up to June 30, 1884, to fulfill educational provisions of the treaties with various Indian tribes.

Name of tribe.	Date of treaty.	Revised Statutes, volume and page.	Provision of treaty.	Amount.
Apache, Kiowa, and Comanche.	Oct. 21, 1867	Vol. 15, p. 583	School building and teacher for every 30 children for twenty years.	$284,200 00
Bannock	July 3, 1868	Vol. 15, p. 675	....do	44,200 00
Cheyenne and Arapahoe.	Oct. 28, 1867	Vol. 15, p. 595	....do	283,100 00
Crow	May 7, 1868	Vol. 15, p. 651	....do	263,200 00
Navajo	June 1, 1868	Vol. 15, p. 669	School building and teacher for every 30 children for ten years.	792,100 00
Northern Cheyenne and Arapahoe.	May 10, 1868	Vol. 15, p. 656	School building and teacher for every 30 children for twenty years.	167,800 00
Shoshone	July 3, 1868	Vol. 15, p. 675	....do	141,700 00
Sioux	Apr. 29, 1868	Vol. 15, p. 637	....do	1,491,600 00
Ute	Mar. 2, 1868	Vol. 15, p. 621	....do	292,500 00
Total				* 3,799,400 00

*Of this amount $503,000 represents school buildings at $1,000 each, and $3,256,400 represents teachers, fuel, school materials, &c., at $700 per school per annum.

The superintendent of Indian schools recommends that at the agencies where manual-labor schools are not maintained there be established a semi-boarding school; that is, where the children shall be furnished a midday meal. The expense of such a school will be but little more than the day schools, and it is believed that a better attendance can be secured than at the day schools, with greater advantage to the children. He recommends the establishment of twenty schools of that character at an expense of about $70,000. I concur in his recommendation.

In my former report I urged the necessity of the creation of a permanent fund for the education of Indians, and especially recommended that the net receipts of the sale of public lands be set apart for that purpose. I again urge the necessity of some provision for a permanent fund, and again recommend that the net proceeds of the sale of public lands be set apart for that purpose, if it is considered desirable to continue to dispose of the public land in any other manner than under the provisions of the homestead law.

COURT OF INDIAN OFFENSES.

Many of the agencies are without law of any kind, and the necessity for some rule of government on the reservations grows more and more apparent each day. If it is the purpose of the Government to civilize the Indians, they must be compelled to desist from the savage and barbarous practices that are calculated to continue them in savagery, no matter what exterior influences are brought to bear on them. Very many of the progressive Indians have become fully alive to the pernicious influences of these heathenish practices indulged in by their people, and have sought to abolish them; in such efforts they have been aided by their missionaries, teachers, and agents, but this has been found impossible even with the aid thus given. The Government furnishes the

teachers, and the charitable people contribute to the support of missionaries, and much time, labor, and money is yearly expended for their elevation, and yet a few non-progressive, degraded Indians are allowed to exhibit before the young and susceptible children all the debauchery, diabolism, and savagery of the worst state of the Indian race. Every man familiar with Indian life will bear witness to the pernicious influence of these savage rites and heathenish customs.

On the 2d of December last, with the view of as soon as possible putting an end to these heathenish practices, I addressed a letter to the Commissioner of Indian Affairs, which I here quote as expressive of my ideas on this subject:

I desire to call your attention to what I regard as a great hindrance to the civilization of the Indians, viz, the continuance of the old heathenish dances, such as the sun-dance, scalp-dance, &c. These dances, or feasts, as they are sometimes called, ought, in my judgment, to be discontinued, and if the Indians now supported by the Government are not willing to discontinue them, the agents should be instructed to compel such discontinuance. These feasts or dances are not social gatherings for the amusement of these people, but, on the contrary, are intended and calculated to stimulate the warlike passions of the young warriors of the tribe. At such feasts the warrior recounts his deeds of daring, boasts of his inhumanity in the destruction of his enemies, and his treatment of the female captives, in language that ought to shock even a savage ear. The audience assents approvingly to his boasts of falsehood, deceit, theft, murder, and rape, and the young listener is informed that this and this only is the road to fame and renown. The result is the demoralization of the young, who are incited to emulate the wicked conduct of their elders, without a thought that in so doing they violate any law, but, on the contrary, with the conviction that in so doing they are securing for themselves an enduring and deserved fame among their people. Active measures should be taken to discourage all feasts and dances of the character I have mentioned.

The marriage relation is also one requiring the immediate attention of the agents. While the Indians were in a state of at least semi-independence, there did not seem to be any great necessity for interference, even if such interference was practicable (which it doubtless was not). While dependent on the chase the Indian did not take many wives, and the great mass found themselves too poor to support more than one; but since the Government supports them this objection no longer exists, and the more numerous the family the greater the number of the rations allowed. I would not advise any interference with plural marriages now existing; but I would by all possible methods discourage future marriages of that character. The marriage relation, if it may be said to exist at all among the Indians, is exceedingly lax in its character, and it will be found impossible, for some time yet, to impress them with our idea of this important relation.

The marriage state, existing only by the consent of both parties, is easily and readily dissolved, the man not recognizing any obligation on his part to care for his offspring. As far as practicable, the Indian having taken to himself a wife should be compelled to continue that relation with her, unless dissolved by some recognized tribunal on the reservation or by the courts. Some system of marriage should be adopted, and the Indian compelled to conform to it. The Indian should also be instructed that he is under obligations to care for and support, not only his wife, but his children, and on his failure, without proper cause, to continue as the head of such family, he ought in some manner to be punished, which should be either by confinement in the guardhouse or agency prison, or by a reduction of his rations.

Another great hindrance to the civilization of the Indians is the influence of the medicine men, who are always found with the anti-progressive party. The medicine

men resort to various artifices and devices to keep the people under their influence, and are especially active in preventing the attendance of the children at the public schools, using their conjurers' arts to prevent the people from abandoning their heathenish rites and customs. While they profess to cure diseases by the administering of a few simple remedies, still they rely mainly on their art of conjuring. Their services are not required even for the administration of the few simple remedies they are competent to recommend, for the Government supplies the several agencies with skillful physicians, who practice among the Indians without charge to them. Steps should be taken to compel these impostors to abandon this deception and discontinue their practices, which are not only without benefit to the Indians but positively injurious to them.

The value of property as an agent of civilization ought not to be overlooked. When an Indian acquires property, with a disposition to retain the same free from tribal or individual interference, he has made a step forward in the road to civilization. One great obstacle to the acquirement of property by the Indian is the very general custom of destroying or distributing his property on the death of a member of his family. Frequently on the death of an important member of the family all the property accumulated by its head is destroyed or carried off by the "mourners," and his family left in desolation and want. While in their independent state but little inconvenience was felt in such a case, on account of the general community of interest and property, in their present condition not only real inconvenience is felt, but disastrous consequences follow. I am informed by reliable authority that frequently the head of a family, finding himself thus despoiled of his property, becomes discouraged, and makes no further attempt to become a property owner. Fear of being considered mean, and attachment to the dead, frequently prevents the owner from interfering to save his property while it is being destroyed in his presence and contrary to his wishes.

It will be extremely difficult to accomplish much towards the civilization of the Indians while these adverse influences are allowed to exist.

The Government having attempted to support the Indians until such time as they shall become self-supporting, the interest of the Government as well as that of the Indians demands that every possible effort should be made to induce them to become self-supporting at as early a day as possible. I therefore suggest whether it is not practicable to formulate certain rules for the government of the Indians on the reservations that shall restrict and ultimately abolish the practices I have mentioned. I am not ignorant of the difficulties that will be encountered in this effort; yet I believe in all the tribes there will be found many Indians who will aid the Government in its efforts to abolish rites and customs so injurious to the Indians and so contrary to the civilization that they earnestly desire.

In accordance with the suggestions of this letter, the Commissioner of Indian Affairs established a tribunal at all agencies, except among the civilized Indians, consisting of three Indians, to be known as the court of Indian offenses. The members of this tribunal consist of the first three officers in rank of the police force, if such selection is approved by the agent; otherwise, the agent may select from among the members of the tribe three suitable persons to constitute such tribunal.

The Commissioner of Indian Affairs, with the approval of the Secretary of the Interior, promulgated certain rules for the government of this tribunal, defining offenses of which it was to take cognizance. It is believed that such a tribunal, composed as it is of Indians, will not be objectionable to the Indians and will be a step in the direction of bringing the Indians under the civilizing influence of law. Since the creation of this tribunal the time has not been sufficient to give it a fair

trial, but so far it promises to accomplish all that was hoped for at the time of its creation. The Commissioner recommends an appropriation for the support of this tribunal, and in such recommendation I concur.

CRIMES.

In my former report I called attention to the necessity for legislation for the punishment of crimes committed on reservations, whether committed by white men on Indians or Indians on white men, or by Indians on each other. Much uncertainty exists as to the power to punish for such offenses committed on reservations. This should be set at rest by proper legislation. As far as possible all reservations should be within the criminal jurisdiction of the State or Territory in which they are located.

The Commissioner of Indian Affairs again calls attention to the persistent attempts made by one Payne and others to invade the Indian Territory for the purpose of settlement, and recommends the enactment of a law adding imprisonment to the fine now provided for. I concur in his recommendation.

Frequent complaints are made of depredations on Indian reservations and on the Indian lands of the Indian Territory, by cutting timber by lawless persons who invade those lands for that purpose. There appears to be no way under existing laws to punish such trespassers, and I recommend that appropriate legislation be had by which parties may be properly punished.

CIVILIZATION OR CONTINGENT FUND.

In my former report I called attention to the need of a contingent fund to be used in the work of civilizing the Indians. I quote the following from my former report:

> From July, 1877, to July, 1881, there was placed to the credit of this fund the sum of $715,000, derived from the sale of certain Indian lands in Kansas. Of this sum $500,000 was expended in the establishment and support of schools, and the remainder in the purchase of wagons, farming tools, stock, &c., with the exception of about $4,800 now on hand.
>
> It will be seen that this sum has been treated as a contingent fund, and was drawn on in all cases where, in the judgment of the Secretary of the Interior, the money could be profitably used in the work of civilizing the Indians. It will be noticed that the annual expenditure from that fund was something over $175,000. It cannot be doubted that the use of such fund has greatly advanced the cause of Indian civilization, and it is doubtful whether any appropriation of equal amount for specific purposes has been as beneficial as that fund.
>
> In making estimates as to the cost of greater efficiency in the school service it must be borne in mind that not less than $125,000 per annum was used from that fund in the support of the schools. It is very difficult to estimate each year for the wants and needs of the Indian service. A liberal contingent fund should therefore be provided, to be used, in the discretion of the Secretary, whenever, through inattention, neglect, or ignorance of the necessities of the case, proper provision has not been made.

A year's experience since making the above suggestion has confirmed my views on that question, and I cannot urge too strongly the necessity of the creation of a fund on which the Department has a discretionary power, not to be used for subsistence, but for aiding exceptional cases for civilizing purposes, such as employing farmers, mechanics, and others to teach by practice the Indians to become farmers, mechanics, stock-raisers, and general laborers.

COMPENSATION OF INDIAN AGENTS.

The salaries allowed to Indian agents are, in most cases, grossly inadequate to the labor performed by them. In several instances agents have found the labor so great and the compensation so small that they have surrendered their positions to accept a larger salary, with less labor and responsibility, in other fields. The work required of an Indian agent is of the highest order, and can only be performed by men of large capacity and business experience. He is charged with the distribution of a large amount of property among the Indians. He submits estimates for the necessary appropriations for his agency, has the general oversight of the affairs of the agency, and directly represents the Government in its efforts to care for, protect, and advance the Indians. Work of this character ought not to be left to men of doubtful financial probity or of questionable morals. Men who can properly perform the work assigned to them as Indian agents can make more money, with less labor and privation, in other pursuits.

I earnestly recommend that the salaries of agents be increased sufficiently to secure good men and retain them in the service.

INDIAN TITLES.

The tenure by which most of the Indian tribes hold their land is very unsatisfactory. In a few cases the Indians are sufficiently advanced to appreciate the advantages of land in severalty, but the great mass of the Indians are not only not ready for land in severalty, but violently opposed to it, and incapable of taking care of such title if given to them. A title in severalty to or individual ownership of land is unknown in Indian polity, and they cannot understand why one man should have a claim on or title to land that he does not occupy, any more than they can understand how one man can become the owner of more air than he needs. They do not cultivate land in common, but each Indian has a separate patch or piece of ground which he tills year after year if he desires. When he neglects to cultivate it, any other person may do so. While he cannot comprehend individual ownership, he does know what title to his tribe means. He has been accustomed to hear the claim made that his tribe owns a section of the country. The invasion by one tribe of the region claimed by another has been the cause of innumerable wars. The denial of ownership in his tribe he fully understands, and whether that denial comes from a hostile tribe or from one of his

own number, it is, in his opinion, a crime to be punished. The reservation belongs to the tribe in trust for all the members thereof if they wish to occupy it. If it is sold, it must be sold for all.

I renew the recommendation that I made on the subject in my former report:

To the end that the Indians may be secure in their titles and have the assurance that they will not be removed, except by their free consent, I recommend the passage of a law to give each tribe a patent for the land the Government has guaranteed to it, leaving the Indians to determine the question of allotment for themselves. This system has given entire satisfaction to the civilized Indians of the Indian Territory, and is consonant with Indian law and religion.

LEASING OF INDIAN LANDS.

In April last, certain parties, alleging that they had made leases or agreements with the Cheyenne and Arapahoe and other Indians of the Indian Territory for the privilege of grazing cattle on the reservation of said Indians, by paying therefor two cents per acre per annum, applied to the Department to have their leases or agreements approved by the Department, and to be put in possession of the lands included in said leases or agreements. It was understood that quite a large amount and nearly all the lands so occupied by the Cheyennes and Arapahoes were included in such leases or agreements. It was urged by the parties desiring the approval of such leases or agreements that the Indians could derive a large revenue from the use of the lands, and be otherwise benefited by such occupation. I did not find authority for the making of such leases or agreements by the Indians, or by the Department, and I therefore declined to approve them, and informed the parties that I saw no objections to allowing the Indians to grant permission to graze cattle on their reservation at fair and reasonable terms; that the authority to so occupy must be given by the tribe, and not an individual member, and the whole tribe must participate in the benefits thereof; that the Department would not feel called on to remove the occupants under such leases or agreements, provided the Indians made no complaints and the Department was satisfied that the Indians were properly treated; that the parties and their employés conformed strictly to the statutes and rules of the Department with respect to the intercourse laws, with reference to the introduction of liquors, fire-arms, ammunition, &c.; that the Department would, when it appeared to be desirable for the public interest to do so, exercise its right of supervision to the extent of removing all occupants, without reference to such leases or agreements, on such notice as might be right and proper under the circumstances; and that all parties, in accepting such agreements from the Indians, must accept the same subject to such conditions and to the future action of Congress.

It is undoubtedly to the interest of the Indians to allow parties to graze cattle on their lands, if a fair price is paid for such privileges, as it will in time become a source of considerable revenue to

them, and will familiarize them with the care of stock. It is believed that the owners of herds would soon find it to their interest to hire Indians to herd their stock, and thus another source of revenue would be opened to them. Had the Department approved of the leases or agreements, it would doubtless have been the duty of the Department to collect from the occupants the money to be paid under the terms of such leases or agreements, and such money so collected would necessarily go into the Treasury of the United States. The Indians, having assumed the right to lease the lands, would not readily submit to have the money paid to the Department and put in the Treasury, although such fund might be subsequently used for their benefit. It will be impossible in the present condition of affairs to prevent conflicts between rival claimants for the privilege of grazing on Indian lands within the Indian Territory without legislation. Congress should provide some system by which the unoccupied lands can be leased by the tribe or the Department for the benefit of such tribes, and the money expended for the tribe without covering it into the Treasury.

CASH ANNUITIES TO INDIANS.

During the year there has been paid to Indians, in cash, about $200,000, as interest on indebtedness to them. The practice of paying cash to the Indians is a pernicious one, for as a general rule the money is expended for useless, if not injurious, articles, and ought to be discontinued.

INDIAN HOMESTEADS.

The Commissioner of Indian Affairs recommends that a fund be placed at the disposal of the Department to pay the fees of homestead entries by Indians. In this I heartily concur. I think when an Indian will settle on land, intending to make it his home, he ought to be encouraged in so doing.

IRRIGATION.

A large number of reservations are situated within the arid regions, where agriculture cannot be carried on without irrigation. In some instances the cost of constructing ditches is very great, and it cannot be done by the Indians without material assistance on the part of the Government. It is folly to attempt to farm such reservations without provision for an adequate supply of water. I therefore recommend that an appropriation be made for the purpose of constructing ditches on such reservations as can be farmed only by irrigation.

THE GREAT SIOUX RESERVATION.

This reservation, including the agencies of Cheyenne River, Lower Brulé, Standing Rock, Pine Ridge, and Rosebud, contains, according to the report of the Commissioner of Indian Affairs for 1882, 48,924 square miles, with a population of about 24,000 inhabitants, or about 1 to two

square miles. The total number of acres cultivated on said reservation were 3,484, or about 5¾ square miles. The land claimed as cultivated consists of small and badly-cultivated fields, and the most of it can scarcely be considered as cultivated land.

The Forty-seventh Congress provided, in an act making appropriations for sundry civil expenses of the Government for the fiscal year ending June 30, 1883, and for other purposes, as follows:

For this amount, or so much thereof as may be necessary to enable the Secretary of the Interior to negotiate with the Sioux Indians for such modification of existing treaties and agreements with said Indians as may be deemed desirable by said Indians and the Secretary of the Interior, five thousand dollars; but any such agreement shall not take effect until ratified by Congress: *Provided, however*, That if any lands shall be acquired from said Indians by the United States, it shall be on the express condition that the United States shall only dispose of the same to actual settlers under the provisions of the homestead laws.

Approved August 7, 1882.

Under this provision commissioners were appointed to confer with the Indians and report to Congress for ratification. On the 1st of February the commission reported, by which it appears that the Indians of the several agencies above mentioned had agreed to cede to the United States about 18,000 square miles on the following conditions:

ART. II. The said Indians do hereby relinquish and cede to the United States all of the great Sioux Reservation—as reserved to them by the treaty of 1868, and modified by the agreement of 1876—not herein specifically reserved and set apart as separate reservations for them. The said bands do severally agree to accept and occupy the separate reservations to which they are herein assigned as their permanent homes, and they do hereby severally relinquish to the other bands respectively occupying the other separate reservations all right, title, and interest in and to the same, reserving to themselves only the reservation herein set apart for their separate use and occupation.

ART. III. In consideration of the cession of territory and rights, as herein made, and upon compliance with each and every obligation assumed by the said Indians, the United States hereby agrees that each head of a family entitled to select three hundred and twenty acres of land, under Article VI of the treaty of 1868, may, in the manner and form therein prescribed, select and secure for purposes of cultivation, in addition to said three hundred and twenty acres, a tract of land not exceeding eighty (80) acres, within his reservation for each of his children, living at the ratification of this agreement, under the age of eighteen (18) years; and such child upon arriving at the age of eighteen (18) years shall have such selection certified to him or her in lieu of the selection granted in the second clause of said Article VI; but no right of alienation or encumbrance is acquired by such selection and occupation, unless hereafter authorized by act of Congress.

ART. IV. The United States further agrees to furnish and deliver to the said Indians twenty-five thousand (25,000) cows and one thousand (1,000) bulls, of which the occupants of each of said separate reservations shall receive such proportion as the number of Indians thereon bears to the whole number of Indian parties to this agreement. All of the said cattle and their progeny shall bear the brand of the Indian Department, and shall be held subject to the disposal of said Department, and shall not be sold, exchanged, or slaughtered, except by consent or order of the agent in charge, until such time as this restriction shall be removed by the Commissioner of Indian Affairs.

ART. V. It is also agreed that the United States will furnish and deliver to each

lodge of said Indians or family of persons legally incorporated with them, who shall, in good faith, select land within the reservation to which such lodge or family belongs, and begin the cultivation thereof, *one good cow and one well-broken pair of oxen, with yoke and chain*, within reasonable time after making such selection and settlement.

ART. VI. The United States will also furnish to each reservation herein made and described a physician, carpenter, miller, engineer, farmer, and blacksmith, for a period of ten years from the date of this agreement.

ART. VII. It is hereby agreed that the sixteenth and thirty-sixth section of each township in said separate reservations shall be reserved for school purposes, for the use of the inhabitants of said reservations, as provided in sections 1946 and 1947 of the Revised Statutes of the United States.

It is also agreed that the provisions of Article VII of the treaty of 1868, securing to said Indians the benefits of education, shall be continued in force for *not less than twenty* (20) *years, from and after the ratification of this agreement.*

ART. VIII. The provisions of the treaty of 1868, and the agreement of 1876, except as herein modified, shall continue in full force.

This agreement shall not be binding upon either party until it shall have received the approval of the President and Congress of the United States.

This agreement was not signed by a majority of the adults, but by the chiefs and headmen. The treaty of 1868 required that all treaties thereafter made should be ratified by three-fourths of the adults; but the treaty of 1876, ceding the Black Hills, was not executed in accordance with the treaty of 1868. The commissioners considered this as a precedent, and decided to accept the action of the chiefs and headmen as that of the tribe's, which is in strict accordance with Indian law.

Congress declined to ratify the agreement, and required that three-fourths of the adults should subscribe to the same. The commissioners have not made report of the progress made in securing signatures to such agreement; but it is alleged that the Indians have very generally concluded that it is not for their interest to dispose of the lands in the way proposed, and doubtless much dissatisfaction exists among them in relation thereto. It has been asserted that the price paid is not sufficient, and that the Indians were not informed as to the true meaning of the agreement; and it is not doubted that the Indians now so assert. It is not possible to make a treaty or an agreement with the Indians with which they will not be dissatisfied. Almost immediately after the agreement was signed by the chiefs and headmen, certain parties advised the Indians that they should not treat with the Government for a cession of lands unless they were paid in cash, and every effort was made by interested parties to induce the Indians to retire from the agreement. If one-half of the amount proposed to be expended for their benefit was offered them in cash, there can be no question but they would readily agree to the cession. It is difficult to make an Indian comprehend the benefits he will derive from the cession of land unless he is paid in cash or its equivalent. He does not look forward to the time when he is to be self-supporting, but expects the Government to supply all his wants and pay him in cash or its equivalent for the lands which he values mainly as the means of securing compensation from the Government, and not for use. This treaty leaves these

Indians much more land than they will need for stock or farming purposes, being something over one square mile to each Indian, "great and small."

Whether the proposed payments are sufficient must be determined from the value of the land and the tenure under which it is held. It does not appear from an examination of the treaty of 1868 that it was the intention on the part of the Government to recognize the whole of that vast tract of land called the Sioux Reservation as the property of the Sioux alone, for it is provided that other Indians might be settled on the reservation with the consent of the Indians thereon; no provision is made for compensation for the land to be taken for that purpose. It appears to have been the purpose of the Government in reserving that vast tract to secure to each Sioux Indian a piece of land for his personal benefit; for it is provided that the head of a family should be allowed to take not exceeding 320 acres, and others a less amount; out of the reservation these smaller pieces were to be carved. The amount of land stipulated to be given to the Indians is more than double the amount that is allowed citizens of the United States to take under the settlement laws. It is also provided in the treaty of 1868 that if the tract reserved was not sufficient to secure the required amount of land other land should be added. There is also a provision that any male Indian eighteen years of age of said tribes may take a homestead of 160 acres anywhere on public land by residing on it for three years. It is further provided in the act of 1868 that, on the selection of land as aforesaid, the Government would give to parties selecting the same seeds, agricultural implements, &c., to the value of one hundred dollars the first year and twenty-five dollars per year for three years thereafter; and that each person engaging in farming should receive $20 per year, or $10 more than if he continued to roam over the reservation. The treaty of 1868 provides that schools shall be maintained at Government expense for every thirty scholars; also that the United States would furnish to each family that should commence farming one good American cow and one good well-broken pair of American oxen. The treaty of 1876 provides that the Government should erect comfortable houses for such of the Indians as should desire to farm. It is very evident that the great object in making the treaty was to induce the Indians to settle on farms and become farmers. But little effort has been made to comply with the conditions of these treaties on the part of the Government. I have shown in another part of this report that there is due the Sioux, under the provisions for the support of schools, $1,491,600. The Indians have built themselves on the reservation 2,519 houses. The Government should have constructed these houses, which the Indians have constructed substantially without Government aid.

This item alone, allowing $500 for each house, which is as little as they can be built for, leaves the Government indebted to the Indians the sum of.	$1,259,500
the Government had furnished one cow and one yoke of oxen to each family so locating, there would have been expended on this item alone	503,800

The extra $10 to each Indian locating on a farm	$25,190
$100 for each family so locating would require	251,900
$25 for three years, equal to $75 one year	188,925
Or a total of	2,229,315
Deduct all payments that might be properly charged to their account	217,139
Leaving a total of	2,012,176
To this must be added the sum due on account of failure to furnish schools according to the treaty	1,491,600
Making a total of	3,503,776

Besides this the Government is under obligations to build houses for all Indians not having houses, and furnish each with a yoke of oxen, cow, seeds, &c., as the Indians shall be entitled to, by locating on land of their own. The proposed agreement provides for the delivery of 25,000 cows and 1,000 bulls, of a total value of not less than $850,000. The provision for the continuance of the appropriation for the support of schools for an additional sixteen years will require an annual appropriation of about $106,500, or, in the total, about $170,000, or a total under the present agreement of $2,550,000 for these two items alone; other provisions of the agreement will require an additional sum. It is doubtful whether the Indians will be benefited by these large appropriations. If the conditions of the treaties of 1868 and 1876, together with those in the present agreement, are carried out in good faith on the part of the Government, the Indians will need no further aid from the Government, and can readily be made self supporting within the next ten years. The total annual appropriation for these Indians for the fiscal year was about $1,700,000, the most of which is for subsistence, and its expenditure does little for the Indian except to keep him alive.

APACHES OF ARIZONA.

In my last report I called attention to the annual raids made by the Apaches of Arizona. In April last a number of the citizens of Arizona were killed, and a large amount of property stolen or destroyed by a band of Apaches that left the San Carlos Reservation in April, 1882, or before that time. In attempting to escape they passed into New Mexico, and killed Mr. McComas and wife and took their young son prisoner. The people of Arizona were greatly excited over the murders of their fellow-citizens and the destruction of their property, and threatened to take vengeance on the Indians on the reservation, claiming that the murders were committed by those Indians.

It is not at all surprising that the people of Arizona should have been excited over these outrages, occurring each year with the regularity of the seasons, and that in the excitement always attending an Indian raid they should contemplate holding the whole tribe responsible for the acts of a comparatively small number of the tribe. There is nothing more terrible to a new settlement than an Indian raid. No one

knows when the blow will fall, or where next the stealthy foe will appear. It is not open warfare, where every man has a fair show with his antagonist; it is not war; it is assassination. In such raids the Indians are careful not to meet any considerable number of whites, but they watch for the farmer at his work, the defenseless household, or traveler on the highway. When the citizens assemble, the Indian hides in the mountains until they disappear, and then he awaits his time to return and wreak his vengeance on the unarmed and defenseless citizens, regardless of age or sex.

In my former report I pointed out the danger to the San Carlos Indians if these raids were not stopped. Should these raids be continued, I am confident nothing but the presence of a military force will protect the Indians at San Carlos from destruction. The people believe the agency is the harbor for renegades, thieves, and murderers, and it is to be feared that heretofore such belief has not been without foundation, although it is not believed that any agency Indian was implicated in the last murders.

The Indians engaged in the raid escaped into New Mexico with but little danger to themselves. The commander of the district of Arizona, General Crook, pursued them into Mexico, and compelled the surrender of a portion of the hostiles, who were brought back to the reservation as prisoners of war. Some difficulty occurred as to the disposal of these Indians. They were prisoners of war, had surrendered with the idea that they would not be punished, and would be permitted to return to the reservation. General Crook hoped to secure quite a number of hostiles that had not surrendered, but had, through the prisoners taken, indicated their intention of so doing. After careful consideration of the case it was thought best to allow them to remain as prisoners of war on the reservation, hoping by so doing those still out might be secured, and then all danger of further hostilities, for the time at least, be avoided. General Crook was given full charge of the police of the reservation, for it was not thought to be prudent to divide the responsibility of keeping peace on the reservation, and the Department was not willing to attempt to keep peace with the prisoners of war freed from military control. The condition is an anomalous one, and one that cannot long continue. It is quite certain that the presence of the prisoners among the agency Indians has been very demoralizing. These Indians are guilty of murders and other crimes, and subject to the laws of Arizona and New Mexico, where the crimes were committed. General Crook says that they were not promised immunity for past offenses, but it is quite evident that they returned with the idea that they would not be punished for the crimes committed.

It does not appear to be the duty of the Department of the Interior to determine whether these offenders should be punished or not. At this time they are prisoners of war, in the hands of the War Department. If possible they should be removed from the agency to some

point where there will be less danger of their escape, and where their evil influences will not be felt by the more peaceably disposed of the tribe.

SAN CARLOS RESERVATION.

The San Carlos or White Mountain Reservation was established November 9, 1871, by Executive order, and contains 2,528,000 acres. The reservation should be carefully surveyed, and such portions as are not needed for the support of the Indians should be cut off.

This reservation is not the property of the Apache Indians residing on it, but it is quite difficult to make the Indians understand that a reservation set apart for their use is not theirs.

Since the establishment of this reservation there have been discovered on the exterior parts thereof both coal and silver mines. The coal mines are located in the southern part on land unfit for cultivation. These coal beds were first discovered by miners, who alleged that they were off of the reservation, and who still insist that such is the case; but a survey by the surveyor-general of Arizona affords proof of the falsity of this claim. It is however alleged that the prospectors who first discovered the coal mines acted in good faith, supposing that such coal fields were off of the reservation, and expended considerable labor in opening them. These coal fields are very valuable, and, as this fuel is much needed in Arizona, some arrangement should be made by which the public shall have the advantage of such discovery. It is competent for the President by Executive order to reduce the reservation, and thus throw the coal fields out of the reservation, but it is not thought advisable to do so without compensating the Indians for the land so taken, for, as before stated, it will be very difficult to make them understand that they are not being robbed. Some compensation should therefore be provided before the land is sold. If the claims of the prospectors should be found to be correct, that is, that they were in ignorance of the boundaries of the reservation (the Government not having established boundaries), they ought to be allowed to derive some advantage from their work, either by being allowed to purchase at a reduced price or to lease for a term of years.

NORTHERN CHEYENNES.

In 1881 Little Chief and his band, numbering 235, left the Cheyenne and Arapahoe Agency in the Indian Territory and proceeded to Pine Ridge, Dak. They were subsequently joined by 82 others. A large number of this band have located on Tongue River, Montana, and are making commendable efforts to support themselves. Since my former report the remainder of the Northern Cheyennes have left the Indian Territory and are now in Dakota. I recommend that some provisions be made to locate the Indians in Dakota or Montana, and that suitable provisions be made to enable them to engage in agriculture or stock raising.

NAVAJOES.

The Navajoes are located in Northeastern Arizona and Northwestern New Mexico, and number about 15,000. They have large herds of sheep and goats, and are not dependent on the Government except for the maintenance of their agency and the support of schools. I have called attention, in another part of my report, to the amount due these Indians under the provisions for the maintenance of schools. There is also due these Indians, from an appropriation made to carry out the seventh article of the treaty of June, 1868, the sum of $96,651.74, which is available for the purchase of seeds and agricultural implements for their use. It is not desirable to use all of this fund for the purposes for which it was appropriated, but it is very desirable to use a portion of it for the purpose of improving the breed of sheep and horses now owned by these Indians. I therefore recommend that the authority be given to use the balance in the purchase of stock, payment of employés, and general expenses in procuring better grades of stock and in policing said reservation. It is found very difficult to keep these Indians on their reservation, for as the grass becomes scarce they leave their reservation and go on to the adjoining lands, and there come in contact with the stockmen and farmers of the adjacent regions. It is very desirable that an efficient police should be provided for, either out of the fund before mentioned or by a general appropriation.

CHEROKEE OUTLET ON LAND WEST OF 96°.

The last Congress, in an act entitled "An act making appropriations for sundry civil expenses of the Government for the fiscal year ending June thirtieth, eighteen hundred and eighty-four, and for other purposes," provided as follows:

That the sum of three hundred thousand dollars is hereby appropriated, to be paid into the treasury of the Cherokee Nation out of the funds due under appraisement for Cherokee lands west of the Arkansas River, which sum shall be expended as the acts of the Cherokee legislature direct, this amount to be immediately available: *Provided*, That the Cherokee Nation, through its proper authorities, shall execute conveyances, satisfactory to the Secretary of the Interior, to the United States in trust only for the benefit of the Pawnees, Poncas, Nez Percés, Otoes and Missourias, and Osages now occupying said tract, as they respectively occupy the same before the payment of said sum of money.

On the 14th of June last, under the provision of said act, deeds were duly executed by the Cherokee Nation to the United States in trust for the several tribes as hereafter stated.

Tribe.	Area in acres.	When settled.	Statute under which settlement was made.
Osage	1,470,058.98	Apr., 1872	Act of Congress June 5, 1872, 17 Stat., p. 228.
Kansas	100,137.32	June 21, 1873	Act of Congress June 5, 1872, 17 Stat. p., 228.
Pawnee	230,014.04	June, 1875	Act of Congress April 10, 1876, 19 Stat., p. 29.
Ponca	101,894.31	July 28, 1878	Act of Congress May 27, 1878, 20 Stat., p. 76.
Nez Percé	90,710.89	Feb., 1879	Act of Congress May 27, 1878, 20 Stat., p. 74.
Otoe and Missouria	129,113.20	Oct. 23, 1881	Act of Congress March 3, 1881, 21 Stat., p. 318.

On receiving such deeds the $300,000 provided in the said act was paid to the Cherokee Nation.

DISPUTED CITIZENSHIP IN THE INDIAN TERRITORY.

The Cherokees and Choctaws claim the right to determine for themselves who are citizens, and that it is the duty of the Government to remove all persons that their constituted authorities declare are not citizens. The Department, acting under an opinion of the Attorney-General of December 12, 1879, has refused to recognize such claim, and has asserted the right to determine for itself who are and who are not citizens when called on to remove persons claimed to be intruders. On this subject the Commissioner of Indian Affairs, in his report, says:

> In view of the magnitude of the interests involved and the unsettled condition of these nations consequent upon the presence of this unrecognized population, and its rapid increase among them, I respectfully recommend that Congress authorize the appointment and provide for the payment of the expenses of a commission, whose duty it shall be to visit these nations, consider the points of difference between the Indians and the alleged intruders or non-citizens, and after determining upon rules of procedure for the final adjustment of the question, attend the councils of said nations, and submit said rules for their consideration and action, which, when adopted by them, and approved by the Department, shall be final and conclusive.

I concur in his recommendation.

CROW INDIAN RESERVATION.

This reservation is situated in the Territory of Montana, and contains 7,364 square miles, or 4,713,000 acres of land. A large part of this is unfit for cultivation, but the very best of grazing land. These Indians should be located on the Big Horn, with a suitable reservation for agricultural and pastoral purposes, and the balance sold. At least 3,000,000 acres might thus be disposed of, leaving the Indians sufficient agricultural lands to become self-supporting, if they desire to become agriculturists, and a sufficient amount of grazing lands should they prefer to become stock-raisers. The 1,713,000 acres that would be left would give nearly, if not quite, 600 acres of land to each individual member of their tribes. The number of Crows has been estimated at 3,500; but it is quite certain that the number is much less, and probably not over 2,500 or 3,000. A portion of the money realized for such sale should be at once invested in a herd for the tribes, and cared for by the Government until such time as the Indians shall be prepared to accept and care for their stock themselves. The proceeds of the surplus lands, properly used, would make the Crows self-supporting in a few years at the farthest.

BLACKFEET RESERVATION.

The number of Indians on this reservation is about 12,000. Until recently they have been able to support themselves largely by hunting, but the disappearance of the buffaloes is likely to cause great suffering

among them during the coming winter and spring if an additional appropriation is not made for them.

Inspector Howard reports from Fort Belknap, on the 17th of October, 1883, that "for the first time in the history of the agency the buffalo has failed to visit that region." Heretofore the buffalo meat and hides secured by the Indians have been sufficient, with the limited aid given by the Government, to give them fair support. If the Indians fail to secure buffaloes, as it is now quite certain they will, there is great danger of starvation among them. They must certainly starve unless they live off of the stock in the vicinity of the agency, but not on the reservation. If the Indians are driven by hunger to kill the cattle on the ranges belonging to herders who are rightfully in that section of country, there will be great danger of a collision between the herders and the Indians, and if such collision does not occur there will be a great loss of property, for the Indians will doubtless destroy more than they use. These Indians have a fine grazing country and some good agricultural lands that can be utilized by irrigation. A suitable appropriation should be made for their immediate wants, and provisions made for stocking the range with cattle, and they will soon become self-supporting from the growth of such herds.

CHIEF MOSES.

During the year 1878, the settlers of Washington Territory were greatly excited over the restless disposition shown by the Indians owing to the outbreak of the Snakes and Bannocks in the Territory of Idaho. Among the Indians causing this uneasiness was Chief Moses and his band, numbering about 150. Agent Wilbur endeavored, without success, to induce Moses and his band to go on the Yakima Reservation. Moses was accused of participation in certain murders, which he denied. The agent, fearing trouble for Moses and his band, asked permission to bring him to Washington for a conference with the Secretary. This was authorized, and Moses came on, and at a conference held with the Secretary in April, 1879, it was agreed that a reservation adjoining the Colville Reservation should be established for him and his band. On the 19th of April of that year, the Columbia Reservation, consisting of 1,994,240 acres, was established by Executive order, and on the 6th of March, 1880, by Executive order, there was added to said reservation 1,092,480 acres, making the total area of 3,086,720 acres. On Moses' return to Washington Territory he declined to go on the reservation, but set up title to it, and leased it for a nominal sum for grazing purposes. At the time of the establishment of the reservation there were a number of farmers and miners located on lands in the northern part of the reservation, whose rights were not respected, and who made complaints to the Department and protested against this reservation including their possessions. On the 23d of February, 1883, a strip fifteen miles wide on the northern part of the reservation, including such possessions and some

peaceable Indians, was, by Executive order, cut off from this reservation. Notwithstanding Moses had not lived on the reservation, and that it still contained 362,880 acres more than it did when he agreed to go on it, he complained bitterly that he was being robbed of his property. Much uneasiness was felt both by the settlers and military commander of the district on account of Moses' threatening attitude. Early last spring General Miles, commander of the Department of the Columbia, advised the bringing of Moses to Washington to confer with the Department. The Department not having funds applicable to that purpose, he was brought to Washington by the War Department. On the 7th of July a conference was held with Moses, at which it was agreed that the Secretary would ask Congress to make a suitable appropriation to enable him and his band to settle on the Colville Reservation and that the Columbia Reservation be abandoned. Moses was accompanied by Sar-sop-kin, the chief of a small band residing on the Columbia Reservation, and To-nas-cat, a Christian Indian from the Colville Reservation. Moses asserted that he had not gone upon the reservation because the Government had given him a reservation occupied by both whites and Indians, and that they disputed his right to the same, but asserted that he was willing to give up the reservation if the Government would compensate him in some way and allow him to go on the Colville Reservation, give him $1,000 to build a house, $1,000 per annum during his lifetime, furnish his band with two cows each; also, that the head of each family or each adult male should have a wagon, double harness, grain-cradle, plow, hand-hoe, scythe, and such other implements as are necessary, and build and maintain a school, saw-mill, and grist-mill when needed. Sar-sop-kin stipulated that he should be allowed to remain on the farm he then occupied, with sufficient other land to make his holding four square miles, and that each head of a family or adult male of his band should have 640 acres out of the Columbia Reservation, to be selected by himself and his band, or that he might remove to the Colville Reservation with the same rights as the Indians on such reservation, and that if he did so remove, his band should receive one hundred head of cows and such farming implements as needed.

To-nas-cat asked, in consideration that Moses and others should be allowed to remove to the Colville Reservation, that a saw-mill and grist-mill should be built, a boarding-school established capable of accommodating 100 children, saying that if it was the children should attend, and that he, as principal chief, be allowed $100 per year during his lifetime. He also suggested that the Government ought to build a church; but yielded that point on the suggestion that the school-house could be used as a church.

The Secretary agreed to submit these propositions to Congress, and to recommend that the appropriation be made to carry them out. Chief

Moses returned to Washington Territory, and awaits the action of Congress.

It is now too late to question the propriety of the arrangement made with Moses in 1879. He will not surrender the reservation without some trouble unless he is compensated in some way for what he doubtless considers belongs to him. It is not proposed to support his band, but to give them the means of making themselves self-supporting. Sar-sop-kin and his band are now cultivating land, and it is doubtless good policy to give them the aid they require. To-nas-cat represents the progressive Indians of the Colville Reservation, and is worthy of encouragement and support. The total area of lands thus open to settlement, if the Indians are all removed to the Colville Reservation, is 2,357,120 acres. It is difficult to fix the amount required to carry out the proposed arrangement, but aside from the future support of the schools stipulated for, it is not believed it will exceed $85,000, which is the amount General Miles estimates will be required.

I therefore recommend that an appropriation be made to carry out the spirit of the above proposition.

MISSION INDIANS OF CALIFORNIA.

Believing it desirable to obtain more authentic information concerning these Indians than that possessed by the Department, on the 9th of January, 1883, Mrs. Helen Jackson, of Colorado, and Mr. Abbott Kinney, of California, were appointed to make an examination of the condition and location of these Indians, and report to the Department. Mrs. Jackson, having spent some time in California studying the history of these people, was well qualified for the work; besides, she has given much attention to the Indian question, and was known to have their interest much at heart. Mr. Kinney, a gentleman of character, had also taken a deep interest in the welfare of these people. Both Mrs. Jackson and Mr. Kinney exacted nothing of the Government except the expenses actually incurred in their work. The work could not well be performed during the winter, and was not undertaken until spring. On the 13th of July Mrs. Jackson and Mr. Kinney made their report.

From their report it appears that these Indians number 2,907. The report contains a list of the villages occupied by them—sixteen villages; besides, it is alleged that quite a number live in the white settlements and towns. Some of the villages are on the reservations established for these Indians, others on public land, and not a few on what is claimed to be private land. It is said that fifty years ago these Indians numbered between 20,000 and 30,000, and their condition was much better than it now is. These Indians are not savages, but a semi-civilized people, peaceable and industrious, attached to the Catholic Church.

In a report made to the Interior Department in 1853, Mr. D. B. Wilson made the following statement:

> These same Indians had built all the houses in the country, planted all the fields and vineyards. Under the missions there were masons, carpenters, plasterers, soap-

makers, tanners, shoemakers, blacksmiths, millers, bakers, cooks, brickmakers, carters, and cartmakers, weavers and spinners, saddlers, shepherds, agriculturists, horticulturists, vineros, vaqueros, in a word they filled all the laborious occupations known to civilized society.

With the settlement of California by the people of the United States came a demand for land; and the Indians who had dwelt in villages for nearly three-quarters of a century, supposing they owned the land, found themselves rudely dispossessed, and compelled to seek other localities. Leaving their former homes, they made others only to be again dispossessed when some one of the "superior race" coveted their possessions. The history of these people since that time appears to have been one of suffering and misery. But little effort appears to have been made to help them, and after a period of thirty years' close contact with the highest civilization of the world, they are poorer and more degraded than ever before. With an intelligent oversight on the part of the Government, and with but little expenditure of money, these people might now be valuable members of the community in which they live. The aid extended to them by the Government has been of but little advantage because they have been without a fixed and permanent abode, and because such aid has not been directed with that intelligence that a work of that kind demands. Slowly but surely the Mission Indians are disappearing, and each year renders it more difficult for them to maintain themselves, even in their now wretched condition.

Those Indians not already provided for should be placed on land of their own, secured to them by patent from the Government, and some aid given them in the first instance, in the way of stock, or agricultural implements, and schools should be established among them. It is doubtful whether a sufficient quantity of public land can be found in that part of California suitable for their support. If this is the case, the Government should purchase the required amount, which can be done without any great outlay of money. Such reservations as have been established should be at once surveyed, and so marked that the Indians will have no difficulty in determining their boundaries. Indians claiming to have property in land included within Mexican grants should have an opportunity to try the question of their rights in the courts, and to that end an appropriation to employ counsel to conduct such suits should be made.

INDIANS OFF OF THE RESERVATION.

There has been much complaint coming from stockmen and settlers in the vicinity of Indian reservations, that the Indians are allowed to go off of the reservations to hunt, and that while out in such hunting parties, they depredate on the settlers and stockmen by killing cattle, stealing horses, &c. In some instances the charges have been without *foundation;* but it is believed that the settlers and stockmen in some

sections have suffered considerable loss from such parties. In some of the treaties with the Indians they reserve the right to hunt off of the reservation, and as they are generally well informed as to all the provisions of a treaty favorable to them, the agent finds it difficult to keep them on the reservation. In some cases the appropriations for their support are so small that they are compelled to support themselves, in part at least, by hunting. It is quite certain that as game becomes more difficult to obtain, the Indians will increase their depredations, especially those who are suffering the pangs of hunger. It would be difficult to restrain white men under like circumstances, and it is much more difficult to restrain Indians, who have very loose ideas concerning the rights of others. The only remedy is to keep them on their reservations, and this cannot be done unless they are supplied with suitable food, either by the Government or through their own exertions, and whenever they have in treaties with the Government reserved the right to hunt off of the reservation, such treaty should be modified, and in consideration of such modification they should be supplied with work and stock, cattle or agricultural implements, or both.

SURVEYING THE BOUNDARIES OF INDIAN RESERVATIONS.

One great difficulty in keeping the Indians on their reservation and the whites off is the uncertainty of the boundary lines. The exterior of all the reservations should be surveyed, and plainly marked, so that neither Indians nor whites would have difficulty in determining the boundaries thereof, and I recommend a suitable appropriation for this purpose.

GENERAL LAND OFFICE.

The report of the Commissioner of the General Land Office shows that the disposal of public lands under all acts of Congress aggregates 19,430,032.80 acres, of which amount 339,235.91 acres, were Indian lands, and 1,999,335.71 acres railroad sections under various acts of Congress. The total cash receipts in connection with the disposal of the public lands amounted to $11,713,883.70, of which amount $625,404.27 was on account of the sale of Indian lands. The increase in receipts for the year 1883 over that of the year 1882 was $3,319,367.66, and over that of 1881, $6,305,079.34; pre-emption and private entries, 4,465,665.49 acres; timber-culture entries, 3,110,930.23 acres; the number of homestead entries 56,565, embracing 8,171,914.38 acres. Not included in the lands disposed of, and in addition thereto, were 47,933 pre-emption filings, 4,999 soldiers' declaratory statements, and 10,232 miscellaneous filings, these three items embracing in the aggregate 8,000,000 acres.

The increase in the number of claims recorded in 1883 was 55,548 over that of the year 1882, and 93,700 over that of the year 1881; the number of entries approved for patenting under various laws, 53,847; an increase of 26,239 over that of the year 1882. Four thousand two

hundred and seventy-four contested cases were examined and acted upon during the fiscal year. The number of pre-emption cases undecided June 20, 1883, was 12,542, an increase of the number in arrears of 2,370, and 11,912 new cases were received for action. A considerable amount of timber land was sold at public sale; but no land valuable for agricultural purposes has been offered at public sale. The vast amount of work done by the Land Office during the fiscal year can be seen from the foregoing summary.

The Commissioner again renews his recommendation that the pre-emption law be repealed. He says:

In my last annual report I renewed the recommendation frequently made by my predecessors that the pre-emption law be repealed.

Continued experience demonstrates the advisability and necessity of such repeal.

The objection that much good has heretofore resulted from the pre-emption system, and that it should not be discontinued because abused, appears to me without good foundation under the changed conditions created by the homestead law.

Before the homestead system was adopted the only method by which unoffered public lands could be obtained by settlers was by pre-emption. All the advantages of the pre-emption system are now embraced in the homestead laws. The same lands can be entered upon the same conditions and proofs and the payment of the same price under the homestead law as under the pre-emption law.

We have simply a double system for the same purpose, employing two sets of machinery, two agencies of adjustment, and a duplication of records, when only one is required. The administration of the law would be simplified and the labor and expense lessened by a discontinuance of the now unnecessary system of pre-emption.

He also recommends the repeal of the timber-culture law, and says:

In my last annual report I called attention to the abuses flowing from the operations of this act. Continued experience has demonstrated that these abuses are inherent in the law, and beyond the reach of administrative methods for their correction.

Settlement on the land is not required; even residence within the State or Territory in which the land is situated is not a condition to an entry. A mere entry of record holds the land for one year without the performance of any act of cultivation. The meager act of breaking five acres, which can be done at the close of the year as well as at the beginning, holds the land for the second year. Comparatively trivial acts hold it for a third year. During these periods relinquishments of the entries are sold to homestead or other settlers at such price as the land may command.

My information leads me to the conclusion that a majority of entries under the timber-culture act are made for speculative purposes, and not for the cultivation of timber. Compliance with law in these cases is a mere pretense and does not result in the production of timber. On the contrary, as one entry in a section exhausts the timber-culture right in that section, it follows that every fraudulent entry prevents a *bona fide* one on any portion of the section within which the fraudulent entry is made. My information is that no trees are to be seen over vast regions of country where timber-culture entries have been most numerous.

He recommends its repeal, and I fully concur with him in such recommendation.

The Commissioner recommends that the homestead law be so amended as to require a period of not less than six months after a settlement claim has been placed on record before final proof shall be admitted, irrespect-

ive of alleged time of residence prior to the time of entry. In this I also concur.

The attention of the Department has been called to the frequent frauds committed by parties securing lands under existing settlement laws without a compliance therewith. In very many cases there is not even an attempt to comply with the laws. When the country was new, and the parties desiring to secure land comparatively few, it is believed that these laws were complied with in most cases when land was entered, but as the demand for land has increased, it seems as if the people are restless under the restraint imposed on them in securing land, and they go to work systematically to defeat the very purpose of the law. The homestead and pre-emption laws, designed to secure to the actual settler lands at a reasonable price, have become agencies by which the capitalist secures large and valuable areas of the public land at but little expense.

The parties thus securing land without a compliance with the terms of the law rarely hold the title thereto for any considerable time. In many cases, doubtless, such conveyances are made for the purpose of placing the title in the hands of those not connected with the frauds practiced at the time of entry, and in other cases from a desire to realize the value of the land. Much embarrassment arises from the attempt on the part of the Department to avoid such fraudulent entries. No difficulty is found where the parties making such fraudulent entries still hold the title, but in case there has been a transfer for a valuable consideration without notice of the fraud, great injustice is done to the purchaser by disturbing the title which he had no reason to suppose was fraudulent. Where the fraud is discovered before the issue of the patent the Department finds no difficulty in canceling the entry, but where such entries have passed to patent resort must be had to the courts. In some cases fictitious names are used in the entry, and under a well known principle of law no title passes by such entry and patent. On the records of the United States, as well as in the local office of record, there appears to be a good title in the patentee for the premises described in the patent. The local records show a conveyance to some one who professes to be the owner; on the strength of such patent and the conveyance under it, for a valuable consideration, a conveyance is made to a *bona fide* purchaser who subsequently finds his title attacked by the Government. If it is clearly established that the grantee in the patent had no existence, the title is held to be in the Government, and the purchaser has no remedy except against the vendor, who is usually impecunious, and not infrequently has left the country. It would appear to be right that after a certain time the presumption should be conclusive that the patent was issued in strict accordance with law, and there should be no inquiry into the proceedings anterior to the time of issue.

FENCING PUBLIC LAND.

There has been much complaint concerning the illegal appropriation of the public land by parties who for stock purposes inclose vast commons to which they do not pretend to have any right except such as is given to them by fencing the same.

Concerning these the Commissioner of the General Land Office says:

> The practice of inclosing public lands by private persons and companies for exclusive use as stock ranges is extensively continued in States and Territories west of the Mississippi River. These ranges sometimes cover several hundred thousand acres. Special agents report that they have ridden many miles through single inclosures, and that the same often contain much fine farming land.
>
> Summer and winter ranges in different sections of country are frequently controlled in the same manner by the same persons, who cause their cattle to be driven from one to the other, according to the season, keeping the whole of the land under fence and preventing the stock of smaller ranchmen from feeding upon any portion of it.
>
> Foreign as well as American capital is understood to be largely invested in stock-raising enterprises involving unlawful appropriation of the public lands. Legal settlements by citizens of the country are arbitrarily prohibited, public travel is interrupted, and complaints have been made of the detention of the mails through the existence of these inclosures. Reports have been received of the use of violence to intimidate settlers or expel them from the inclosed lands.

In April last the Commissioner, by my direction and consent, gave notice as follows:

> The fencing of large bodies of public land beyond that allowed by law is illegal, and against the right of others who desire to settle or graze their cattle on the inclosed tracts.
>
> Graziers will not be allowed, on any pretext whatever, to fence the public lands and thus practically withdraw them from the operation of the settlement laws.
>
> This Department will interpose no objection to the destruction of these fences by persons who desire to make *bona fide* settlement on the inclosed tracts, but are prevented by the fences, or by threats or violence, from doing so.
>
> The Government will take proper proceedings against persons unlawfully inclosing tracts of public land whenever, after this notice, it shall appear that by such inclosures they prevent settlements on such lands by others who are entitled to make settlement under the public land laws of the United States.

In December, 1882, the Department reported the case of Alexander H. Swan *et al.*, charged with unlawful fencing of the public land in Wyoming Territory, to the Department of Justice. The United States attorney for Wyoming Territory brought a suit in equity against the parties to compel the removal of the fences. The district court held that such suit would lie, and ordered the fences removed. Proceedings, however, of this character involve much time and delay, and I therefore recommend some legislation on this subject that will enable the Department to remove such fences without the expense and delay of a suit in equity.

Public lands suitable for agriculture should be disposed of only to the actual settler under the homestead laws. A strict compliance with the law should be required in all cases. No greater calamity can befall a country than to have the land owned by a few, and thus compel the

masses of the people to become the tenants of such land-owners. It has been the policy of the Government heretofore to distribute the public land among the people in such quantities as would enable all desiring to engage in agriculture to do so as land-owners, and not as renters. As the country grows rich the tendency is to aggregate the lands in the hands of a less number of people; this is an evil with which the General Government is not called to deal after it has parted with the title to its land, but as the owner of the public land, held for the people of the United States, it becomes the duty of the Government to see that the laws intended to secure a fair distribution of these lands are strictly enforced.

RAILROAD LAND GRANTS.

In my last report I called attention to the necessity for some legislation in reference to lapsed grants. The necessity for such legislation still exists, and I repeat what I said on that subject:

> Congress has from time to time, commencing in 1850, made grants to the several States or to corporations to aid in the construction of railroads. In some instances the roads have been constructed and in others partially completed; but in some cases no attempt has been made to build the roads and thus secure a title to the land. The lands thus granted have been withheld from the operation of the settlement laws. The Supreme Court of the United States has declared, in the case of Schulenburg v. Harriman (21 Wallace, 44), that a failure to complete the road within the time fixed in the grant did not forfeit the grant. Lands thus withheld from the operation of the settlement laws must so remain until Congress shall declare such lands forfeited. If it is the intention of Congress to allow the railroad companies to complete their roads after the expiration of the term fixed in the grant, and thus claim the benefit of the grant, it should be so declared at an early day. Large tracts of land are not available for settlement because the settler cannot determine whether the title is in the Government or in the railroad company. If he purchase from the railroad company and it fails to complete its road and secure the title, he takes nothing by such purchase, and he cannot secure the land under the settlement laws, for the Department is not authorized to treat such lands as public lands. Besides this, the even sections within the limits of the grants are subject to cash entry at not less than $2.50 per acre. Thus the settler is sometimes compelled to pay a double price for the privilege of owning lands near a railroad which is never constructed.

It is difficult to make the people understand that the executive department of the Government cannot declare a grant forfeited when the corporation for whose benefit it was made has failed to comply with the conditions thereof. Petitions are presented to the Executive demanding the forfeiture of grants for non-compliance with the conditions thereof. Individual claimants declare themselves outraged because the Commissioner of the General Land Office refuses to allow filings on the odd sections of land within the unforfeited railroad grants. The Government is derided as the Government of the rich and opposed to the poor, because the executive department of the Government does not do what the courts have repeatedly declared could be done only by the legislative branch of the Government, that is, declare a forfeiture of a grant.

Complaint is made that grants made more than a quarter of a century ago are still treated as valid, subsisting grants, and the settler forbidden to go thereon, although nothing has been done toward the building of the road, which must be built before the railroad company can receive the evidence of the title given to it by the Government so many years before.

If the executive department of the Government disregard the law and issues a patent to such settler, he takes nothing by the instrument, and is as much at the mercy of the corporation as if he had not received the Government patent. Congress alone can relieve the settler by declaring the grants forfeited.

If the grants are not forfeited when there has not been a full compliance with the conditions of the grant, it seems to be just and proper that some provision should be made by which the settlers, who, through ignorance, or because they believed such grants had been or would be forfeited, have made settlement on such railroad lands, can secure a title, either through the railroad company or from the Government.

TAXATION OF RAILROAD LANDS.

By section 21 of the act of July 2, 1864 (13 Stat., 356), amendatory of the Pacific Railroad act of July 1, 1862 (12 Stat., 489), it is provided—

> That before any land granted by this act shall be conveyed to any company or party entitled thereto under this act there shall first be paid into the Treasury of the United States the cost of surveying, selecting, and conveying the same, by the said company or party in interest, as the titles shall be required by said company, which amount shall, without any further appropriation, stand to the credit of the proper account, to be used by the Commissioner of the General Land Office for the prosecution of the survey of the public lands along the line of said road, and so from year to year until the whole shall be completed, as provided under the provisions of this act.

By act of July 31, 1876 (21 Stat., 121), substantially the same provision was extended to all railroad companies receiving grants of lands, "unless * * * exempted by law from the payment of such cost."

By the failure of the companies to pay such costs and apply for patents a large amount of lands granted and available for railroad purposes are, under the rulings and decisions of the Supreme Court, as enunciated in Kansas Pacific Railway Company *v.* Prescott (16 Wall., 603) and Railroad Company *v.* McShane (22 Wall., 444), substantially relieved from State taxation, and contribute nothing to the fair support of the burden and revenue of the local governments, and at the same time deny to the General Government the due compensation provided by law for the surveys already extended over a portion of the lands, and the benefit of the enlarged appropriations intended to secure further surveys along the line of the road.

Experience has shown that, instead of aiding the Government and *facilitating* the survey and sale of the public lands along the routes,

and the consequent settlement of the country, the provision has operated to retard such laudable results, and also has served to enable the companies to obtain such valuable parcels of land as they may find speedy profit in selling, thus imposing the full burden of taxation upon their grantees and other settlers who purchase lands in the same neighborhood, while refusing to take the patents for the larger body of less valuable lands upon which such burden would fall in the hands of the companies themselves.

It is earnestly to be desired that some means of adjustment of these grants, as a whole, be provided, or some method devised which shall, under cover of legislative authority, not only remedy the evil suggested, but enable this Department to reach a finality as to the titles to be conveyed to these corporations at the earliest practicable moment, and thus relieve an anxious and excited public feeling, already sufficiently aroused upon the various difficult and complicated questions connected with the administration of this momentous and important branch of public affairs.

To this end I most urgently recommend that the prompt and serious attention of Congress be invited to the foregoing suggestions.

PENSIONS.

The report of the Commissioner of Pensions shows that at the close of the last fiscal year there were 303,658 pensioners, classified as follows:

Army invalids	198,648
Army widows, minor children, and dependent relatives	74,374
Navy invalids	2,468
Navy widows, minor children, and dependent relatives	1,907
Survivors of the war of 1812	4,831
Widows of those who served in the war of 1812	21,336

There were added to the pension roll during the year the names of 38,162 new pensioners, and 796 whose names had been previously dropped from the pension roll were restored, making the total number added to the roll during the year 38,958, being an excess over the number added the previous year of 10,645. During the year 20,997 pensioners were dropped from the rolls for various causes, leaving a net increase over the rolls of 17,961. The number of persons dropped from the rolls included the names of those who have been carried on the rolls after death until final settlement and payment of the amount due such pensioners. The average annual value of each pension at the close of the year is $106.18, and the aggregate value of all pensions is $32,245,192.43, an increase over the value for the previous year of $2,004,090.81. The total amount paid out for pensions during the year was $60,064,009.23. The excess on the annual value of pensions is mainly for arrears of pensions covering the period prior to the allowance of the claim. The total number of claims filed for disabilities incurred while in the service amounts to 496,721, of which 245,210 have been

allowed; and by widows on account of deaths chargeable to the service 312,029, of which 206,716 have been allowed. The total number of claims filed since 1861 is 886,137, of which number 510,938 have been allowed. During the same period there has been paid for pensions, with cost of disbursement, the sum of $621,073,297.60. The Commissioner says:

> Of the whole number of army invalid claims filed from 1861 to 1865, both inclusive, representing the first period, five years (while the war of the rebellion was yet in progress), 76.7 per cent. have been allowed; for the next five years to 1870, 88.8 per cent. have been allowed; for the next five years to 1875, 64.8 per cent. have been allowed; the next five years to 1880, which terminates the arrears period, 39.4 per cent. have been allowed, and for the next period of three years to 1883 (to date), 4.6 per cent. have been allowed; or of all claims of this class of army invalids filed within the arrears period (prior to July, 1880) 57.4 per cent. have been allowed, and there are still pending 111,730 army invalid claims at the close of the present fiscal year.

The number of cases appealed from the Commissioner of Pensions to the Secretary during the past year is 746. These cases involve much labor and attention on the part of the Secretary and his assistants. The Commissioner reports that the system of special examination in the field is of great importance both to the office and to claimants, and that results obtained through it have been satisfactory.

The passage of the arrears of pension act of March 3, 1879, caused the filing of a large number of additional claims by parties who did not before that time consider the amount to be paid sufficient to compensate them for the trouble or annoyance of securing a pension. A great number of persons have established pension agencies, so called, for the procuring of pensions, and it has been ascertained that a number of them have resorted to various devices and tricks to induce the soldier or dependent relative to apply for a pension. Circulars have been sent out advising the soldier that a large amount had been appropriated, and that all soldiers would receive pensions who should apply, and various methods have been pursued to induce the applicants to pay the fee or a part of it. The office has been embarrassed by such proceedings, and, in many cases, the soldiers have been swindled by paying fees to parties who well knew the soldier was not entitled to a pension. Evidence collected has been withheld by such pension agents or attorneys until the soldier would pay them a fee. A number of persons detected in such evil practices have been suspended and disbarred from practicing before the Department of the Interior. The evil complained of is one of considerable magnitude, and Congress should provide by suitable legislation for their punishment.

Payments are made to pensioners once in three months. Very many pensioners are wholly dependent on the amount received from the Government for their support. The amount paid is generally so small that it is exhausted before the next pay day, and the pensioner resorts to the money lender to secure a small loan, at exorbitant rates, to be paid *at the next* pay day. In most cases the interest exacted is from five to

twenty per cent. per month. Congress having prohibited the use of the certificates as security for money loaned, the lender has no security, and makes that the excuse for extorting such conscienceless interest from the needy borrower. If the pensioner was allowed to pledge his certificate for the payment of small loans, he would doubtless be able to get such loans at better rates; but the improvident and needy would in some instances be robbed of the real value of their pensions. The Government for the protection of the pensioner having denied to him the opportunity of using his certificate as a security for the money he may need to carry him to the next pay day, ought to provide for the payment of the money as it becomes due each month whenever it can be done so, without great inconvenience and loss to the Government. I think the agent should be allowed by law to advance at the end of each month the amount the pensioner is entitled to per month. By so doing the pensioner will be relieved from the necessity of submitting to such extortionate rates. It may not be practicable for the agent to make payment in all cases; but the agent should be authorized to do so whenever in his judgment the necessities of the pensioner demand it. It can be done with but little extra labor whenever the pensioner resides in the vicinity of the agency, so the payments can be made in person.

NEW PENSION BUILDING.

Appropriations for a brick and metal fire-proof building for use of the Pension Bureau have amounted to $400,000, and an appropriation has been made for a heating apparatus of $40,000.

The site indicated by Congress proved to be so unsuitable that under the law a new site in Judiciary Square was recommended to the President and by him approved.

The plans for this site were prepared, approved on the 1st of November, and the ground was broken on the 2d November, 1882.

As the place to be occupied by the building had been filled to a very considerable height above the original and firm soil, the excavations for foundations have been rather heavy, and advantage has been taken of these circumstances to construct a deep and spacious cellar under the south half of the building.

The site is in a high and healthy part of the city, in the north portion of Judiciary Square, and with space of lawn and streets on the north, east, and west gives ample light, and as on the south the building fronts on the line of F street, looking across the open park to the United States court-house, it has light and space on all sides. The site is 35 feet above tide, and is well drained by an 8-foot sewer.

The excavation was made during the winter and spring, and the cellar and foundation walls were built whenever the weather allowed the construction of masonry. At this date the cellars are completed, the walls are raised to the level of the second floor, and the arches covering the first story are begun.

The whole building will be of brick, burned clay, and metal, and be fire-proof throughout.

The expenditures to this time for work and for material, of which a large quantity is on hand, has been $176,070.14 for construction of building, and a contract has been made for heating apparatus much under the appropriation, and this work is now in course of erection, the steam and return pipes being inserted in the flues provided for them and carried up as the walls themselves rise.

There remains available on the construction of the building $223,129.86; for construction of heating apparatus, $39,480.55.

PATENTS.

The report of the Commissioner of Patents shows increased activity in that Bureau during the past fiscal year.

Number of applications for patents received	32,845
Number of applications for design patents received	1,039
Number of applications for reissue patents received	247
Number of applications for registration of trade-marks	854
Number of applications for registration of labels	749
Total	35,734
Number of caveats filed	2,688
Number of patents granted, including reissues and designs	21,185
Number of trade-marks registered	883
Number of labels registered	618
Total	22,686
Number of patents withheld for non-payment of final fees	2,056
Number of patents expired	7,471

RECEIPTS AND EXPENDITURES.

Receipts from all sources	$1,095,884 70
Expenditures (not including printing)	704,348 45
Surplus	391,536 25

COMPARATIVE STATEMENT SHOWING THE INCREASE IN THE WORK.

Number of applications for patents, including reissues, designs, trade-marks, and labels, received—	
During the fiscal year ending June 30, 1881	24,906
During the fiscal year ending June 30, 1882	30,062
During the fiscal year ending June 30, 1883	35,734
Increase 1883 over 1881	10,828
Increase 1883 over 1882	5,672
Number of applications awaiting action on the part of the office on—	
July 1, 1882	3,327
July 1, 1883	4,639
Increase, 39 per cent., or	1,312

Assignments recorded and words written.

	Fiscal year ending—		Increase.
	June 30, 1882.	June 30, 1883.	
Assignments recorded	16,514	17,087	573
Words written in recording assignments and making manuscript copies	20,945,385	21,340,713	395,328

COMPARATIVE STATEMENT SHOWING THE INCREASE IN RECEIPTS.

Fiscal year ending June 30, 1881	$789,895 52
Fiscal year ending June 30, 1882	930,864 14
Fiscal year ending June 30, 1883	1,095,884 70
Increase 1883 over 1881	305,989 18
Increase 1883 over 1882	165,020 56

On the increase of business in the office, the Commissioner says:

The foregoing tabulated statement shows that the business of this office is steadily and rapidly increasing. This increase is not confined to any particular branch of the work, although some classes of inventions are more active than others, but is found in each of the divisions of the office. Every industrial pursuit, which finds its reflex here, vies with every other in seeking the best and most economical means and methods for accomplishing successful results. The field of invention seems to enlarge with the increasing demands and wants of the people and the necessities of labor and capital. Whenever it is found that the use of old devices and appliances is not profitable because of the competitions of trade or labor, the inventive mind finds new ways and means for accomplishing the same or like results at less cost and with equal satisfaction. Improved devices and methods supplant old ones, making that which was difficult easy and that which was expensive cheap. The sum of human knowledge is thus being constantly augmented, the burdens of toil lightened, and the facilities for comfort and happiness increased. Undoubtedly a large majority of the improvements in the arts, sciences, and mechanical devices find their incentive in the hope of gain to the inventor, but the results are the same, whatever be the motive.

The work of the office is largely in arrears, growing out of the insufficient force and rapidly increasing business in the office. The Commissioner and all his assistants have made commendable efforts to keep up the work of the office, and the fact that the work is in arrears cannot be attributed to any lack of effort on their part. As the fees exacted of inventors not only pay all the expense of the Patent Office, but furnish a surplus for the Treasury, it does not appear to be unreasonable on the part of such inventors to demand that their work should be promptly done by competent men. It is a great hardship on the inventor, who has paid the full cost of determining all questions concerning his application, to be told that for want of sufficient force he must wait weeks, and perhaps months, for the result that ought to be declared in as many days.

The Commissioner recommends an increase in the salaries of examiners and assistant examiners. It has been found very difficult to keep many of the best examiners and assistant examiners at the salary paid.

A thorough acquaintance with the business of the office, and especially of the particular art assigned to such examiners, is a prerequisite to success in the office, and as soon as the examiner has mastered the intricacies of the art assigned to him, together with the principles of patent law, he is offered a more tempting position, as practitioner before the Department or in the courts, as a patent lawyer. The number of examiners and assistant examiners should be increased, and their salaries increased to an amount that will secure the great majority to the service for a number of years after they have familiarized themselves with their work.

It is not only the inventor who is interested in having the work of the Patent Office promptly and thoroughly done; the whole public is likewise interested.

By section 494 of the Revised Statutes the Commissioner of Patents is required to report to Congress annually, before the 1st of January. This provision appears to have been incorporated into the Revised Statutes from the act of July 8, 1870, but is but a remnant of an act approved March 3, 1837, at which time the Patent Office was under the supervision of the Secretary of State. By the act of March 3, 1849, the Commissioner of Patents became subordinate to and under the control of the Department of the Interior. I therefore recommend that the Commissioner make a direct report of the business of the Patent Office to the Secretary of the Interior.

BUREAU OF EDUCATION.

The Commissioner of Education reports a very large increase of work in all the divisions of his office. The communications sent out numbered 30,745, and those received 67,875. An entire rearrangement of the document division has been effected, with great labor, which adds much to its efficiency. The documents distributed numbered 323,592, and were usually mailed in separate parcels. Many of these documents were sent in response to individual requests, one document having been asked for by at least ten thousand persons, and requiring the writing of as many separate addresses.

This distribution of documents has favorably affected many educational methods and appliances; *e. g.*, the teachers' institutes have been much more freely supplied than before. The edition of circulars of information has been enlarged on account of these increased demands for information, and several of those most in request have been reprinted. The Commissioner states that the annual report is the result of information gratuitously supplied by more than nine thousand correspondents of the office, all of whom should in equity be rewarded by a copy of the document which they have aided in producing, and that a large additional number is needed to supply other requests from writers, pro-

fessors, teachers, school officers, the press, public libraries, and other worthy sources, for which reason he urges that twenty thousand extra copies of this report and of similar issues hereafter for distribution by the office be authorized.

The system of voluntary statistical information instituted by this help is believed to be the most extensive and complete in existence, and shows that the objects and methods as well as the publications of the office are acceptable to the educators of the country. The usefulness of the office is of course chiefly determined by the benefit that the people derive from its publications; these should therefore contain information not only about whatever good or ill occurs in the experience of our own people, numerous, active, and independent as they are, but also about what is happening or is observed abroad, and particularly as to the results of all scientific and careful investigations respecting matters connected with the nurture, education, and training of the young for the best performance of their duties as the citizens of the future.

So far as the limited means at his disposal have allowed, the Commissioner has sought to secure the results of these labors, domestic and foreign; but those requiring the expenditure of money have been practically beyond his power for lack of means. The salaried assistants in the office are not able to do all the work required by the office in its various relations to the public, and the funds now appropriated and available for outside help amount only to two thousand two hundred dollars.

Respecting the work now in progress, he mentions an inquiry into the methods and extent of instruction in shorthand; a compilation of the school laws and decisions in the several States relative to public schools; articles on hygiene in colleges and universities, and on the methods and progress of teachers' institutes; histories of normal training and of collegiate instruction; researches into the organization of State school systems; the methods and subjects of instruction in rural schools; instruction in drawing; and the relation of education to industry. In addition to these subjects there is a general desire expressed for the thorough consideration of school-house ventilation under the various climatic conditions of the whole country, but this cannot yet be undertaken, because the appropriations at hand are insufficient.

The museum illustrating the conditions and appliances of education has been somewhat enlarged and much more studied by the public. Already it is affecting favorably the methods and illustrations used in many schools. A small but important collection of articles lent to the Louisville Exposition has attracted much attention and very favorable comment.

The library of the office, now numbering 16,200 volumes and 37,000 pamphlets, is increasing in usefulness and value much faster than in size as the card catalogue approaches completion.

The Commissioner further mentions the many intelligent movements

of public thought directed to the improvement of instruction, such as the great desire to overcome illiteracy and non-attendance, and the strong feeling expressed in favor of national aid to education; the increased attention given to measures for the mental and bodily health of children under instruction; the interest manifested in training in arts, trades, and domestic industries; and the rise of numerous schools for teaching these branches; the greater satisfaction expressed about the new departure in the education of Indian children, especially among practical teachers and educators; and the increased attendance and fuller expression of opinion at large gatherings of people in various parts of the country. Another proof of the general importance of education as a subject of public thought is afforded in the exchange of ideas and influences going on between this country and other nations, where the influence of American ideas in elementary instruction and in the wider training of women is as manifest abroad as is the example of higher education in other countries upon the courses and objects of our colleges and universities.

The Commissioner renews his recommendation that some measure of Federal aid be extended to public primary education, based on the number of illiterates reported by the Tenth Census, as a measure of immense importance to the present and the future of the nation.

In this recommendation of the Commissioner I fully concur. In a number of the States adequate provision for the education of children of all classes has not been made. It is hardly worth while to inquire why this has not been done. The duty on the part of the General Government is the same, whether such failure arises from causes beyond the control of such State, or whether it arises from indifference to the wants of the people. It should not be the object of the General Government to build up a national school system independent of State control, but to supplement the work already begun in the several States, by affording to the State financial aid commensurate to the wants of the State, and this can be more readily determined by reference to the tables of illiteracy than in any other way. In many of the States the school system is only lacking in efficiency on account of the lack of funds to support the schools provided for. In such cases it is believed that a liberal appropriation by the General Government would so stimulate the State system that the States could be ultimately left to carry on the work without Government aid. The appropriation by the General Government should be made dependent on similar aid by the States, and for a few years it should be increased as the State increases its facilities for its expenditure, and then, in like manner, the aid from the General Government should be gradually withdrawn, and the State increase its appropriation in proportion as the national aid is withdrawn, and ultimately the State should be left to conduct its school system without national aid.

OFFICE OF COMMISSIONER OF RAILROADS.

The report of the Commissioner of Railroads, herewith presented, gives the operations of that office during the fiscal year ending June 30, 1883.

Officers of the Bureau have examined the property and accounts of the several railroads coming within its jurisdiction. The properties are well maintained, and whilst the traffic is steadily increasing in volume, the rates charged are gradually decreasing.

Proper facilities for intelligent and comprehensive inspection of the various properties of the several roads have been, as heretofore, freely accorded. The books and accounts of the companies have been examined and statements of the 5 and 25 per centum of ascertained "net earnings" have been made. The Commissioner notes a marked improvement in the method of accounting and reporting to his office by several of the roads, which is highly gratifying.

Statements are submitted showing in detail the indebtedness of the subsidized roads to the United States, earnings and expenses, and general financial condition; also as to ability to pay dividends on capital stock.

The Commissioner gives statements in detail in regard to the sinking funds of the Union and Central Pacific companies, showing the sums covered into said funds by the United States Treasury Department and the character and amount of investments.

Particular attention is called to the circular of the Treasury Department dated June 27, 1883, giving the decision of the First Comptroller of the Treasury in the matter of withholding payments for transportation for the Government by roads which have not been subsidized with bonds.

CONDITION OF THE BOND AND INTEREST ACCOUNT.

The public debt statement issued by the Treasury Department June 30, 1883, shows the condition of the accounts with the several Pacific Railroad companies as to moneys actually covered in to their credit, but takes no account of moneys in the sinking fund held by the Treasurer of the United States, or of the compensation for services not at that time settled by the accounting officers.

Name of railway.	Principal outstanding.	Interest accrued and not yet paid by the United States.	Interest paid by the United States.	Interest repaid by companies to credit of bond and interest account.		Balance of interest paid by the United States.
				By transportation services.	By cash payments, 5 per cent. of net earnings.	
Central Pacific	$25,885,120 00	$776,553 60	$23,452,555 27	$4,592,158 25	$648,271 96	$18,312,125 06
Western Pacific	1,970,560 00	59,116 80	1,608,248 94	9,307 00	.....	1,658,881 94
Union Pacific	27,236,512 00	817,095 36	24,957,850 41	8,933,292 87	.....	16,024,557 54
Kansas Pacific	6,303,000 00	189,090 00	6,129,333 09	2,969,049 59	.....	3,160,283 50
Central Branch Union Pacific	1,600,960 00	48,000 00	1,549,808 26	152,157 10	6,926 91	1,390,724 25
Sioux City and Pacific	1,628,320 00	48,849 60	1,464,297 49	121,355 39	.....	1,342,942 10
Total	64,623,512 00	1,938,705 36	59,222,093 46	16,777,380 20	655,198 87	41,789,514 39

The semi-annual interest which matured July 1, 1883, is included under the heading "Interest paid by the United States."

The Commissioner reports the total indebtedness of the several subsidized Pacific railroads to the United States on June 30, 1883, to be as follows:

TOTAL DEBT.

Union Pacific (including Kansas Pacific):		
Principal	$33,539,512 00	
Accrued interest	31,087,183 50	
		$64,626,695 50
Central Pacific (including Western Pacific):		
Principal	27,855,680 00	
Accrued interest	25,120,804 21	
		52,976,484 21
Sioux City and Pacific:		
Principal	1,628,320 00	
Accrued interest	1,464,297 49	
		3,092,617 49
Central Branch Union Pacific:		
Principal	1,600,000 00	
Accrued interest	1,549,808 26	
		3,149,808 26
Total		123,845,605 46

TOTAL CREDIT.

Transportation services performed and money paid into the Treasury:	
Union Pacific	$13,535,040 05
Central Pacific	7,653,813 07
Sioux City and Pacific	121,355 39
Central Branch Union Pacific	159,084 01
Total	21,469,292 52
Balance in favor of the United States, but not due until maturity of the principal (1895–'99)	102,376,312 94

CONDITION OF THE SINKING-FUND ACCOUNTS.

The Commissioner gives a detailed statement showing the condition of the sinking funds of the Union and Central Pacific companies, held by the Treasurer of the United States under the act of Congress approved May 7, 1878, from which it will be seen that on June 30, 1883, these funds amounted to $4,036,713.45; the Central Pacific having to its credit $2,404,015.86, and the Union Pacific $1,632,697.59. Investments have been made by the Secretary of the Treasury as follows:

Character of bonds.	Union Pacific.	Central Pacific.	Total.
Funded loan of 1881 (5 per cent.)	$256,450 00	$796,700 00	$993,150 00
Funded loan of 1907 (4 per cent.)	32,650 00	199,100 00	231,750 00
Currency 6's	361,000 00	444,000 00	805,000 00
Principal	650,100 00	1,379,800 00	2,029,900 00
Premium paid	124,065 43	179,563 73	303,629 16
Total cost	774,165 43	1,559,363 73	2,333,529 16

On June 30, 1883, the amounts remaining in the United States Treasury, *uninvested*, were as follows:

Credit of the Union Pacific	$858,532 16
Credit of the Central Pacific	844,652 13
Total	1,703,184 29

That the sinking fund has not accomplished the result anticipated is quite evident, and may be regarded as a failure for want of suitable investment. The last investment for the Union Pacific was made April 6, 1881, at which time a premium as high as 35 per centum was paid, but the company repeatedly protested against such high rates of premium. Reference to the foregoing table will show that the sum of $650,100 has been invested at a cost of $124,065.43, or an average premium of nearly 20 per centum. On June 30, 1882, the amount in the sinking fund uninvested was $407,441.99, and on June 30, 1883, it had increased to $858,532.16. This is a manifest hardship to the company, as this large amount should be drawing a fair rate of interest.

The last investment for the Central Pacific was made November 27, 1882, the sum of $541,800 having been invested in the funded loan of 1881 continued at 3½ per centum, at a premium of 2 per centum. The sum of $1,379,800 has been invested for this company at a cost of $179,563.73. On June 30, 1883, the amount in the sinking fund uninvested was $844,652.13.

Section 3 of the act of May 7, 1878, provides that the "sinking fund shall be invested by the Secretary of the Treasury in bonds of the United States," and directs that preference be given the 5 per cent. bonds, but it evidently was not foreseen that the 6, 5, and 4 per cent. bonds might be called in or extended at a lower rate of interest.

In his report for 1882, page 12, the Commissioner recommended:

> That section 3 of the act of May 7, 1878, be so amended as to authorize the Secretary of the Treasury to invest the sinking funds in the first-mortgage bonds of the companies, or such bonds as have been issued to them by the United States, or in other good and sufficient securities, and to convert the bonds now held by the Treasurer of the United States in said sinking funds into money at the market rates, and reinvest the same in like securities.

He renews this recommendation, but suggests that it would be a better plan to have all amounts covered into the Treasury bear a certain rate of interest per annum (say 3 per centum), thus avoiding all questions of investments, premiums, &c.

The Commissioner also urgently renews his suggestion whether it would not be wisest and best for Congress to commute the present mode of payment by the roads which have been aided with bonds into one of fixed amounts not dependent upon the fluctuations of net earnings, or the contingencies of competition which might cause net earnings to disappear, substituting securities having the same lien and of fixed amounts, and payable at fixed periods, for the present book-account indebtedness.

GEOLOGICAL SURVEYS.

The act making appropriations for the fiscal year 1882–'83 provides for a geological map of the United States. It is proposed to publish this map in atlas sheets, each being composed of one degree of longitude by one of latitude in area, bounded by parallels and meridians. In making this map the Director will avail himself of the surveys heretofore made, either by State or national authority. For the convenience of administration, the area of the United States has been divided into seven districts, as follows:

I. *District of the North Atlantic*, comprising Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut, New York, New Jersey, Pennsylvania, Delaware, Maryland, and the District of Columbia.

II. *District of the South Atlantic*, comprising Virginia, North Carolina, South Carolina, Georgia, Florida, Alabama, Tennessee, Kentucky, and West Virginia.

III. *District of the North Mississippi*, comprising Ohio, Indiana, Illinois, Michigan, Wisconsin, Minnesota, Dakota, Nebraska, Kansas, Iowa, and Missouri.

IV. *District of the South Mississippi*, comprising Indian Territory, Arkansas, Mississippi, Louisiana, and Texas.

V. *District of the Rocky Mountains*, comprising Montana, Wyoming, Colorado, part of Utah, New Mexico, and part of Arizona.

VI. *District of the Great Basin*, comprising parts of Washington Territory, Oregon, California, Utah, Arizona, Nevada, and Idaho.

VII. *District of the Pacific*, comprising part of Washington Territory, part of Oregon, and the greater portion of California.

During the past year the work of the Survey has been vigorously prosecuted in the Western States and Territories, especially in the regions producing the precious metals. An examination has also been made of the valuable coal-fields, and especially of the valuable fields of anthracite and bituminous coals of Colorado. It is believed that great good will result from a careful examination and accurate report on the mineral productions of the yet but partially explored regions of the Rocky Mountain country. It is doubtless desirable that all sections of the country should be thoroughly examined with reference to their hidden wealth, and it is of the utmost importance that the results of such examination shall be attainable by all the people at little or no expense. I therefore suggest that a liberal appropriation be made for the publication of the reports of the Survey. Such reports ought not to be indiscriminately distributed, but should be as far as possible placed in the hands of those whose interest or taste leads them to an examination of the subject of such reports.

GOVERNMENT FOR ALASKA.

The necessity for a government for Alaska is becoming very apparent. The report of the discovery of gold on the Yukon River and in other sections has stimulated immigration, and already quite a large number of people are prospecting and developing mines. A mining district has been formed at or near Harrisburg, and quite a number of citizens of the United States have attempted to secure mineral claims in that vicinity by observing the provisions of the United States laws concerning the location of mineral lands.

In a communication dated March 10, 1883, addressed to the Secretary of the Interior by the Jeannette Mining Company, the Alaska Mill Mining Company, the General Miller Mining Company, and others, it is alleged that the companies had located mineral claims, complying with all the laws of the United States applicable to the location and maintenance of quartz-mining claims, and that certain miners from the British possessions, without authority or right, took possession of such claims, and have held the same ever since by force, taking therefrom not less than $350,000. I am informed that some of the parties above named have expended considerable money in the erection of a quartz-mill and other improvements for mining purposes. The petition further says:

> Alaska has never been organized by Congress into a Territory. It has no government, no laws (excepting those pertaining to customs and to intercourse, and with the Indians), no court, no judicial or executive officer; and therefore the undersigned have no means whatever of enforcing their rights, or protecting or developing their property, or of preventing its spoliation at the hands of unauthorized persons. Under the treaty with Russia, by which the Territory was ceded to the United States, the United States guaranteed, at least as far as the Russian subjects were concerned, protection to life, liberty, and property; and the undersigned are led to believe, and are so advised, that in the absence of any government or any other method of redressing their wrongs, the Department of the Interior, with its general jurisdiction over the lands of the United States, has the jurisdiction to determine the rights of the undersigned, as citizens of the United States, and to enforce these rights.

The Department of the Interior could not, in the absence of legislation, afford the petitioners the relief sought. The reported discovery of very rich mines on the Yukon River will doubtless attract a large population there another year, and if there is not a stable government neither property nor personal rights will be respected. Several establishments for the canning of fish and the manufacture of lumber have been established in different parts of the Territory, and it is believed that the fisheries and forests will soon attract a large number of persons, even if the gold fields should not prove productive. The total population of the Territory of Alaska is not far from 30,000. Of this number about 5,000 are Aleuts, who are not barbarians if they are not of the highest order of civilization. Before the cession by Russia good schools were maintained among them, but since the cession the schools

have been discontinued, and the adult Aleut who received his education under the Russian Government and at its expense, sees his children growing up without education. Suitable provision should be made for the education of the children of the Aleuts, which can be done without great expense. Also an appropriation ought to be made for the maintenance of at least two manual-labor schools for the education of the children of the less civilized Indians.

Under the third section of the treaty of cession, it was provided as follows:

> The inhabitants of the ceded territory, according to their choice, reserving their natural allegiance, may return to Russia within three years, but if they should prefer to remain in the ceded territory, they, with the exception of uncivilized native tribes, shall be admitted to the enjoyments of all the rights, advantages, and immunities of citizens of the United States, and shall be maintained and protected in the free enjoyment of their liberty, property, and religion. The uncivilized tribes will be subject to such laws and regulations as the United States may, from time to time, adopt in regard to aboriginal tribes of that country.

The laws of the United States and the Territory of Washington should be, as far as applicable, extended over it, and this for the present would avoid the necessity of a legislature. There should be a governor, secretary, judges, marshal, and district attorney. The total expense of such a government could not exceed $40,000 per annum.

THE UTAH COMMISSION.

The Board of Commissioners appointed by the President under the act of March 22, 1882, entitled "An act to amend section 5352 of the Revised Statutes in reference to bigamy, and for other purposes," report, that by action of the Board under the provisions of said act, all persons practicing polygamy were excluded from the polls; that the legislature elected in August last is composed entirely of Mormons, none of whom, however, are polygamists. The legislature will convene in January next.

The Board reports also that at the August election there were elected, in addition to the members of the legislature, probate judges, clerks of county courts, assessors, sheriffs, county treasurers, county superintendents of schools, and officers, numbering in all 900, all of whom are monogamist Mormons. The elections were conducted in a quiet and orderly way. The vote in August last was Mormons, 20,708; liberals, or anti-Mormons, 1,453. This last vote, however, does not appear to represent the real strength of the liberal party, for in November, 1882, that vote was 4,884.

The Board report that the number of plural marriages has decreased since the passage of the act under which the Board is acting.

Ten suits have been brought against the members of the Board to test the validity of the act of Congress. Some provision should be made to defray the expense of the defense of the Board in these suits.

The Board renew many of the suggestions in their former report as to needed legislation; and, in conclusion, commend the zeal of the governor of Utah in his efforts to enforce the law.

Should the legislature to assemble in January next enact such laws as are provided for in section 9 of the act of March 22, 1882, necessity for such Board will cease, for it is provided that they shall continue in office "until the legislature shall make provision for filling said offices as herein authorized"; that is, until the legislature shall have enacted such laws as shall prohibit all polygamists from participating in the election of public officers, or from holding any such office. It is not provided who shall determine the question whether the legislature provided for the filling of said offices in accordance with the provisions of the said act or not. It is not believed that the legislature will take the steps required; for, while it is composed entirely of Mormons who do not practice polygamy, it is undoubtedly true that they are all believers in the system of plural marriages, and only abstain from its practice from economical or prudential reasons. Should the legislature fail to take the steps required by the act, the necessity still exists for the services of the Board, and it appears to be necessary that such legislation, if attempted, should be submitted to some tribunal to determine whether such legislation is a compliance with the provisions of said act. Congress would appear to be the proper authority for the determination of this question, and therefore I recommend that Congress require the submission of such laws for its approval before they shall be considered by any Department of the Government a compliance with the requirements of the provisions of such act.

YELLOWSTONE NATIONAL PARK.

Within the past year leases have been made in pursuance of the authority conferred by law upon the Secretary of the Interior, of sites within the Park for the erection of hotels and necessary buildings for the accommodation of visitors; one large hotel, at Mammoth Hot Springs, was opened to the public in August, and camps have been maintained during the summer at other points of interest. As a result of this provision for the comfort of tourists and the increased convenience of access to the Park from the completion of railroad communication to within a few miles of its borders, the number of visitors has been much greater than heretofore. Stringent regulations have been established for the prevention of injury to the game and the natural curiosities, and effort has been made to protect visitors from any unreasonable charges for services rendered to them within the Park. The protection of the game and curiosities has not been so perfect as could have been desired, owing in a great measure to the inadequacy of the number of assistants to the superintendent for the proper supervision of so large an area as that embraced within the limits of the Park, and to the fact

that the season was well advanced before these officers could be appointed under the legislation of the last session of Congress. The experience of the past season having demonstrated the necessity for an increase in the number of these assistants and for shelter and equipment essential to their comfort and efficiency, a reasonable amount to cover these expenses has been included in the estimates relating to the Park.

It is believed that better results in the direction of the perfect protection of the Park could be attained if the imposition of penalties for violations of the established regulations of the Department was specially authorized by law. It would also seem to be necessary that more convenient and practicable means should be provided for the protection of the person and property within the Park. The superintendent is clothed with no authority in such matters. The greater portion of the Park is within the jurisdiction, for legal purposes, of Wyoming, the remainder within that of Montana and Idaho, respectively. The nearest law officers of these Territories are so remote that recourse to them for the prevention of crime is practically useless, and the necessary delay in communication affords ample opportunity for the escape of persons charged with violation of law.

HOT SPRINGS.

A plan has been adopted for the improvement of the Hot Springs Creek throughout the extent of the reservation, embracing the straightening of the creek and confining its waters within arched and covered walls of masonry, and the laying of iron pipes for the collection of the hot water from springs found along the course of the creek. A contract has been made for the work, which is being prosecuted with reasonable diligence. An additional appropriation will probably be required for its completion. The execution of the plan will result in great improvement to the reservation, in an increased supply of hot water for bathing purposes, and will also add to the healthfulness of the city of Hot Springs by the covering of the creek, which has heretofore been an open sewer for the refuse of the city. A portion of the reservation has been assigned for the erection thereon of a hospital for the Army and Navy.

TENTH CENSUS.

During the last session of Congress considerable impatience was experienced at the delay in the publication of the result of the census of 1880. It is quite evident that the delay is not the result of inattention on the part of the officers of the Census Office, but that such delay has arisen from the magnitude and variety of the investigations undertaken. It is confidently expected that the Tenth Census will be speedily completed, and in a manner that will be entirely satisfactory to the people.

The Superintendent of the Census reports the following as showing the present condition of the work:

The Compendium was published in February of this year in two octavo volumes, aggregating 1,845 pages, and comprising every class of statistics to be embraced in the full reports of the Census, except those relating to churches, libraries, and schools. A great deal has been done toward preparing the large quarto reports for publication, though not so much as was anticipated at the date of my last report. There were then reported 1,951 pages as stereotyped. The number of stereotyped pages is now 8,686, and 544 pages more are in type.

The population volume is entirely printed, and is now binding. It comprises 1,050 pages, with 41 colored maps, and large numbers of maps and charts in black.

Printing is now in progress on the volume of manufactures, and the maps to illustrate this volume are promised during the present month. The volume on agriculture is only detained by the delay in engraving and printing the maps which exhibit the range of cultivation of the several crops.

A large number of comprehensive and valuable special reports are completely finished, and some of them are in the hands of the Public Printer, who has dealt with the difficulties incident to so vast a work with great zeal, energy, and courtesy toward this Department.

RECONSTRUCTION OF SOUTH WING.

The work of reconstruction of the south wing and main portico of the building occupied by the Interior Department was commenced early in the spring, and since that time has been vigorously prosecuted. As soon as the clerical force stationed in the upper story of this wing was provided with other quarters, the removal of the old work was begun, care being taken to avoid interfering with or disturbing the office work in the lower stories. To secure this result, the rubbish was removed after office hours and at night, the removal being completed about the 15th of September.

As soon as any considerable portion of the wing was cleared, brick-work was commenced and pushed forward as rapidly as possible, the design being to have the walls of the new construction in place by the time the iron-work was received. Considerable progress has been made, and at present the new fire-proof roof over the portico is being constructed. It is hoped that, when the delivery of the iron-work is completed, the roofs over the main building can be promptly put in place.

Congress, at its last session, appropriated $60,000 for this work. Already about $27,000 of this sum has been expended. With the funds remaining on hand the building will be brought under a water-tight roof, overlaid with Portland cement concrete, and this again will be covered with a copper roof of the most approved modern construction. In the interest of economy and the early reoccupation of the building, it is greatly to be regretted that the limited funds at the disposal will not allow the work to be pushed forward during the approaching winter and early spring, when it is likely employment at moderate rates will be eagerly sought by skilled mechanics.

It is estimated that, for the fire-proof reconstruction of the building,

$91,000 will be required during the next fiscal year. For the steam-heating apparatus $18,000 will be required.

The reconstruction of the south wing will add greatly to the space for the clerical force, and, in a measure, lessen the overcrowded condition of the building.

FIRE-ESCAPES, ETC., FOR GOVERNMENT PRINTING OFFICE AND GOVERNMENT HOSPITAL FOR THE INSANE.

The Commission designated by the act of August 7, 1882, to supervise the erection of suitable fire-escapes, stand-pipes, and other facilities for extinguishing fire in the Government Printing Office and the Government Hospital for the Insane, have submitted a report giving the details of the execution of the work intrusted to their charge, from which it appears that suitable appliances of the nature contemplated have been provided for these buildings. The Commission deem it of importance that the attention of Congress should be directed to the insecure condition of the old portion of the Government Printing Office building. They state, "Its floors are of ordinary wooden construction, and are in places saturated with oil, and it is the opinion of the undersigned that these floors ought to be constructed of iron beams and brick arches, like the floors of the newer portion of this building." They also recommend, as a further protection against loss by fire, the construction of fire-proof stairways in the interior of the building and the inclosing of all the interior stairways and elevator shafts within brick walls.

In view of the special difficulties in the way of removing the insane in case of fire and the possible great loss of life that might therefore ensue in such event, the Commission consider it desirable that the main thoroughfares of the hospital should be made as nearly fire proof as possible, and that in renewing the corridor floors from time to time, as necessary, iron beams and brick arches for these floors should be introduced.

BENEFICIARY INSTITUTIONS.

Section 3709 of the Statutes directs that all purchases and contracts for supplies or services in any Department of the Government, except for personal services, shall be made by advertising and contract. It was therefore deemed advisable that such institutions as remain allied to this Department, namely, the Government Hospital for the Insane, the Freedmen's Hospital, and the Columbia Institution for the Deaf and Dumb, should procure their supplies in accordance with this section.

The superintendent of the Hospital for the Insane and the surgeon-in-chief of the Freedmen's Hospital readily assented; and, accordingly, *proposals* were invited and contracts entered into under the same.

The president of the Columbia Institution for the Deaf and Dumb held that, under the provisions of sections 4859 and 4862 Revised Statutes, that institution was not subject to the general laws regarding proposals and contracts, and that it was not within the jurisdiction of the Secretary of the Interior to enforce the provisions of section 3709, above quoted. It would seem advisable that Congress should provide by proper legislation that this institution either be made entirely independent of this Department, or that the law be so amended as to provide that the appropriations made by Congress for its support should be subject to the provisions applicable to expenditures for like purposes for similar institutions.

A comparison of the prices paid for articles in open market for the Columbia Institution during the months of September and October, with contract rates for like articles for the Insane Asylum, shows a difference of about 33 per cent. in favor of the contract system.

HOSPITAL FOR THE INSANE.

The annual report of the Board of Visitors for the Government Hospital for the Insane, for the year 1883, shows that the total number of patients was 1,207, of which 910 were males and 297 females. This is the largest number of patients under treatment in any one year since the close of the late war, and is partially accounted for by the number of patients received from the Home of Disabled Volunteer Soldiers.

The number of patients remaining in the hospital June 30, 1883, was males, 755; females, 239; total, 944.

Of these, 446 are from the Army, 56 from the Navy, and 475 from civil life. Those from civil life are classed as follows: District of Columbia (transient), 24 males and 7 females; District of Columbia (residents indigent), 197 males, 223 females; District of Columbia convicts, 8 males; United States convicts, 5 males; private patients, 5 males and 6 females.

Average number of residents in the hospital	965
Number discharged recovered	94
Number discharged improved	49
Number discharged unimproved	6
Number discharged not insane	1
Percentage of recoveries	44.13

To provide for the influx from the soldier's homes, extensive additions to the hospital have been commenced, and will be completed during the year.

The total expenditure for the year has been $350,719.72.

FREEDMEN'S HOSPITAL.

The surgeon in charge of the Freedmen's Hospital reports that the whole number of patients admitted during the year was 1,601—

Colored	1,017
White	583
Indian	1

About two hundred persons were admitted and treated upon the recommendation of the Commissioner of Pensions and chief of police.

In the dispensary attached, 2,095 persons were treated. The surgeon-in-chief recommends certain improvements in and about the buildings, for which estimates have been submitted.

COLUMBIA INSTITUTION FOR THE DEAF AND DUMB.

The number of pupils instructed during the year was 106: males, 89; females, 17. Of these 41 were in the collegiate department, representing 18 States and the District of Columbia.

The work of instruction has gone on successfully in the several departments, especial attention having been paid to articulation and physical training.

Four students of the college were graduated with the degree of Bachelor of Arts, and the degree of M. A. was conferred on two persons, one of whom was a graduate of the college.

A memorial of the late President Garfield, in the form of a portrait bust in marble, has been presented to the institution by deaf mutes and their friends, representing twenty-six States of the Union and the Federal District. This memorial is to commemorate the important aid rendered to the cause of the higher education of the deaf by General Garfield while he was a member of Congress.

The funds for this purpose, amounting to more than $1,400, were raised by contributions from more than two thousand individuals.

The current expenses of the institution for the year amounted to $60,956.42, of which sum $55,000 were appropriated by Congress; $5,500 were expended in the construction of a farm, barn, and on the improvement of the grounds.

The amounts asked by the directors for the next fiscal year are: For current expenses, $55,000; for improvement of grounds and repairs of buildings, $5,000.

I have the honor to be, very respectfully,

HENRY M. TELLER,
Secretary.

The PRESIDENT.

PAPERS

ACCOMPANYING

REPORT OF THE SECRETARY OF THE INTERIOR.

REPORT OF THE COMMISSIONER OF THE GENERAL LAND OFFICE.

DEPARTMENT OF THE INTERIOR,
GENERAL LAND OFFICE,
Washington, D. C., September 29, 1883.

SIR: I have the honor to submit herewith the annual report of the General Land Office for the fiscal year ending June 30, 1883.

The disposal of public lands under all acts of Congress embraced 19,030,796.89 acres, and of Indian lands 399,235.91 acres, making the total disposals 19,430,032.80 acres; an increase over the year 1882 of 5,120,866.30 acres, and an increase over the year 1881 of 8,536,635.75 acres.

The receipts from all sources in connection with the disposals of public lands were $11,088,479.43, and from sales of Indian lands $625,404.27, a total of $11,713,883.70, being an increase over the year 1882 of $3,319,367.66, and an increase over the year 1881 of $6,305,079.54.

The following is a statement in detail of disposals and receipts:

	Acres.
Cash sales:	
Public sales	273,069.62
Private entries	2,179,955.14
Pre-emption entries	2,285,710.35
Timber and stone land entries	297,735.50
Desert-land entries	436,633.69
Mineral entries	31,520.18
Coal-land entries	15,612.82
Excess payments on homestead and other entries	25,677.00
Abandoned military reservations	1,695.90
Total cash sales	5,547,610.20
Miscellaneous:	
Homestead entries	8,171,914.38
Timber-culture entries	3,110,930.23
Donation entries	4,132.46
Entries with school warrants	289.85
Entries with military bounty land warrants	45,414.42
Entries with agricultural-college scrip	1,440.00
Entries with private land-claim scrip (Supreme Court)	10,580.00
Entries with Valentine scrip	2,600.00
Entries with Porterfield scrip	146.87
Entries with Israel Dodge scrip	800.00
Entries with Wilson scrip	80.00
Entries with Sioux half-breed scrip	792.27
Entries with Chippewa half-breed scrip	160.00
State selections (school, swamp, and internal improvement)	214,570.50
Railroad selections	1,919,335.71
Total	19,030,796.89

	Acres.	Acres.
Indian lands:		
Cherokee school	748.84	
Cherokee strip	59,800.09	
Absentee Shawnee	120.00	
Kansas trust	17,836.75	
Miami	4,976.34	
Osage ceded	1,831.73	
Osage trust	224,646.22	
Otoe and Missouria	467.99	
Sac and Fox	118.72	
Sioux	15,531.55	
Pawnee	73,157.68	
Total	399,235.91	
Making a grand total of (acres)		19,430,032.80

The foregoing total does not include the following entries the areas of which have previously been reported with original entries of the respective classes:

	Acres.
Commuted homesteads	930,876.29
Commuted (act June 15, 1880)	305,243.67
Final desert land entries	55,312.51
Final homestead entries	2,504,414.51
Final timber-culture entries	97,836.08
Total areas previously reported	3,893,683.06

In addition to the foregoing, and not included in the totals of lands disposed of, are pre-emption, homestead, and miscellaneous filings, viz:

Number of pre-emption filings	47,933
Number of soldiers' declaratory statements	4,999
Miscellaneous filings	10,232

The area of lands embraced in these filings aggregates 8,000,000 acres.

Cash receipts:	
From cash sales	$9,657,032 28
From homestead fees and commissions	881,467 01
From timber-culture fees and commissions	262,262 00
From fees on military bounty land warrant locations	1,185 00
From fees on scrip locations	143 00
From fees on pre-emption and other filings	182,039.00
From fees for reducing testimony to writing	48,875.09
From fees on donation claims	125.00
From fees on State selections	3,229.00
From fees on railroad selections	24,004.00
From fees for transcript of records furnished by General Land Office	8,118.05
Total receipts from public lands	11,088,479.43
Receipts from sales of Indian lands (trust funds)	625,404.27
Total	11,713,883.70

ENTRIES AND FILINGS.

The total number of entries and filings posted during the year was 251,685, aggregating 30,000,000 acres. These entries and filings constitute claims of record awaiting completion and adjudication. The increase in number of claims recorded in 1883 was 55,548 over the year 1882, and 93,700 over the year 1881.

The number of entries approved for patenting under the pre-emption, homestead, timber-culture, desert-land, and other settlement and agricultural laws is 53,847, an increase over the previous year of 26,239.

Four thousand two hundred and seventy-four contested cases were examined and acted upon. Seventeen hundred and twenty-seven claims were confirmed by the board of equitable adjudication, an increase of 671 over the number adjudicated the previous year.

AGRICULTURAL PATENTS.

The number of patents issued on the various classes of entries and locations under the general land laws is 50,482, an increase over the previous year of 1,785.

CASH SALES.

The number of private cash entries was 11,104, embracing 2,179,955.14 acres, an increase of 255,458.99 acres; 2,285,710.35 acres were sold under the pre-emption law, an increase of 934,329.52 acres; 1,236,119.96 acres were embraced in commuted homesteads, an increase of 158,736.06 acres. The total cash sales, including land sold at public and private sale, pre-emption, commuted homesteads, mineral lands, timber and stone lands, &c., amount to 6,839,042.67 acres. The amount of receipts from cash sales is $9,657,032.28, an average of a fraction over $1.40 per acre.

PUBLIC SALES.

Sixteen thousand acres of land were offered at public sale in the Gainesville, Fla., district. Three hundred and sixty acres were sold, and the remainder became subject to private entry.

Two million acres of pine-timber lands were offered in the Duluth, Minn., district, and 1,000,000 acres in the Saint Cloud district. About 268,000 acres were sold in both districts, at an average price of $1.90 per acre. The remainder of the lands became subject to private entry at the minimum price.

Ninety-eight additional townships, embracing 1,500,000 acres, were proclaimed for offering in the Saint Cloud district.

PRE-EMPTIONS.

Eight thousand eight hundred and forty-five pre-emption entries were approved for patent in *ex parte* cases, and 741 contested cases were decided, the whole involving 1,500,000 acres.

Eleven thousand nine hundred and twelve new cases were received for action. The number of cases undecided June 20, 1883, was 12,542, an increase of the number in arrear of 2,370.

The number of pre-emption filings placed on record during the year was 47,933, which at 160 acres each would cover 7,669,280 acres.

The general disproportion running through terms of years between the number of claims initiated and the number perfected, and the volume of relinquishments of such claims which are apparently purchased by *bona fide* entrymen or others, satisfy me that pre-emption filings are made, or procured to be made, to a great extent for speculative purposes, and with no intention on the part of the person in whose name the filing is made to perfect the entry, or in any manner to comply with the law.

REPEAL OF THE PRE-EMPTION LAW.

In my last annual report I renewed the recommendation, frequently made by my predecessors, that the pre-emption law be repealed. Continued experience demonstrates the advisability and necessity of such repeal. The objection that much good has heretofore resulted from the pre-emption system, and that it should not be discontinued because abused, appears to me without good foundation under the changed conditions created by the homestead law.

Before the homestead system was adopted the only method by which unoffered public lands could be obtained by settlers was by pre-emption. All the advantages of the pre-emption system are now embraced in the homestead laws. The same lands can be entered upon the same conditions and proofs and the payment of the same price under the homestead law as under the pre-emption law. We have simply a double system for the same purpose, employing two sets of machinery, two agencies of adjustment, and a duplication of records, when only one is required. The administration of the law would be simplified and the labor and expense lessened by a discontinuance of the now unnecessary system of pre-emption.

HOMESTEADS.

The number of original homestead entries during the year was 56,565, embracing an area of 8,171,914.38 acres, an increase of 11,234 entries and 1,823,769.33 acres over the previous year. Final proof was made on 18,998 entries, embracing 2,504,414.51 acres.

One thousand and ninety soldiers' additional claims were presented, of which 569 were approved and 156 rejected.

HOMESTEAD DECLARATORY STATEMENTS.

Four thousand nine hundred and ninety-nine soldiers' homestead declaratory statements were filed, covering 80,000 acres.

These declarations are in the nature of pre-emption filings. The present laws authorize their presentation by agent or attorney. Advantage is taken of this provision to obtain the authorization of soldiers to make filings which are used for speculative purposes by the agent or attorney. The soldier receives no benefit in such cases, but generally pays a fee which he is given to understand will procure for him 160 acres of land that he can sell without going upon it or even seeing it. I have made special effort to check the spread of this fraud upon soldiers of the country and upon the public land laws.

AMENDMENT OF THE HOMESTEAD LAWS.

The present laws and regulations permit settlers on unsurveyed lands who have maintained a residence of five years to make entry and give notice of final proof simultaneously after survey.

Parties who desire to obtain large quantities of land employ men to make entries on newly surveyed land, alleging residence long anterior to the survey. Notice of intention to make proof in thirty days is published, affidavits filed, final certificates issued, and the land patented before an opportunity is had to develop the facts and prevent the consummation of the illegal entry. Special agents report valuable lands in whole ranges of townships in certain districts to have been entered in this manner, when the land shows no evidence of settlement at any time, but is held as portions of large estates.

Notice to the world of claims to public land is a fundamental principle of the land laws. Thirty days' publication, which is frequently made in a distant or obscure newspaper, is insufficient notice for any practical purpose, especially when no entry has previously been recorded.

I think it important that provision be made by statute, fixing a period of not less than six months after a settlement claim has been placed on record before final proof shall be admitted, irrespective of alleged time of residence prior to entry.

COMMUTED HOMESTEADS.

The commutation feature of the homestead law is open to the same abuses as the pre-emption law. The alleged commutation settler is frequently a person employed at so much a month to sign entry papers and hold the claim long enough to enable his employer to secure title by commutation.

This system of illegal appropriation, which is especially made use of in obtaining title to lands of selected value and in large quantities, could be materially checked by an extension of the time within which a homestead entry may be commuted. The actual settler does not usually prefer to pay for his land when by continuing his residence upon it he can obtain title without price. It would be no hardship to require a period of residence sufficient to prevent the present easy evasion of the law. No time is fixed by statute as a condition of residence before commutation, but the same proof and payment may be made as in pre-emption cases. In these cases the regulations of this office require as a general rule that residence of six months shall be shown, and the same rule, is under the law, applied in commuted homestead cases.

I deem it a matter not less important than the repeal of the pre-emption law that the homestead laws should be amended so as to require proof of actual residence and improvement for a period of not less than two years before a homestead entry may be commuted by cash payment.

TIMBER-CULTURE ENTRIES.

Twenty thousand six hundred and one timber-culture entries were made, embracing 3,110,930.23 acres, an increase of 3,444 entries and 554,244.14 acres. Final proof was offered on 723 entries, embracing 97,836.08 acres.

REPEAL OF THE TIMBER-CULTURE-LAW.

In my last annual report I called attention to the abuses flowing from the operations of this act. Continued experience has demonstrated that these abuses are inherent in the law, and beyond the reach of administrative methods for their correction. Settlememt on the land is not required. Even residence within the State or Territory in which the land is situated is not a condition to an entry. A mere entry of record holds the land for one year without the performance of any act of cultivation. The meager act of breaking five acres, which can be done at the close of the year as well as at the beginning, holds the land for the second year. Comparatively trivial acts hold it for a third year. During these periods relinquishments of the entries are sold to homestead or other settlers at such price as the land may command.

My information leads me to the conclusion that a majority of entries under the timber-culture act are made for speculative purposes and not for the cultivation of timber. Compliance with law in these cases is a mere pretence and does not result in the production of timber. On the contrary, as one entry in a section exhausts the timber-culture right in that section, it follows that every fraudulent entry prevents a *bona fide* one on any portion of the section within which the fraudulent entry is made. My information is that no trees are to be seen over vast regions of country where timber-culture entries have been most numerous.

Again, under the operation of the pre-emption, homestead, and timber-culture laws, any one person may enter 160 acres in each class of entry, making a total of 480 acres which may be taken by one person. The

power to acquire that quantity of public land by single individuals, while so many of the citizens of the country are landless, is contrary to the general spirit of the public land laws, and, I think, not in consonance with approved public policy.

This objection would hold to the timber-culture act if the law was generally complied with in good faith, or if its provisions requiring the planting and cultivation of timber were capable of enforcement. I am convinced that the public interests will be served by a total repeal of the law, and I recommend such repeal.

MINERAL LANDS.

Two thousand one hundred and twelve mineral entries were made and 2,312 applications and 390 adverse claims filed. The sales of mineral lands amounted to 47,133 acres, of which 15,612 were coal lands. Two thousand five hundred and twenty cases were examined. One hundred and nineteen contests were received and thirty-one disposed of. One thousand seven hundred and fifty mineral and coal patents were issued. The number of cases undisposed of at the close of the fiscal year was 2,645.

DESERT LANDS.

Twelve hundred and fifty-four desert-land entries were made, embrac ing 436,633.69 acres, an increase over the previous year of 686 entries and 271,677.75 acres. Final proof was made on 215 entries, embracing 55,312.51 acres.

The desert-land act provides that proof of reclamation and final payment shall be made within three years from date of entry. A large number of cases is on the files of this office in which the time has past and proof has not been made as required. At the expiration of the three years the parties were called upon to show cause why their entries should not be canceled. Such showing was made in but few instances. With a view to saving the equities of those who may have attempted in good faith to reclaim the lands entered, but may have been prevented from so doing by the great expense of obtaining water, or other good cause, it has been determined, with your concurrence, to make another call, and give to entrymen a further opportunity to make proof or to show cause for failure.

It has been represented that desert-land entries have largely been made for speculative purposes, in violation of the restrictions of the act, and in many instances upon lands naturally productive, and that lands are held fraudulently under the entry without attempt or intention of reclamation, but are occupied or leased for grazing and other purposes. Investigations so far made of alleged illegal entry under the desert-land act tend to confirm these allegations.

The theory of the desert-land law is, that the encouragement of irrigation required the disposal of land in larger quantities than 160 acres. This theory has not been sustained, as general systems of irrigation are adopted for the distribution of water, which are equally as available to the owners of small tracts as of large ones. The practical operation of the desert-land law has heretofore been to enable land to be purchased without settlement, and in quantities in excess of the limit established by the settlement laws, thus resulting in the encouragement of monopoly rather than the encouragement of reclamation.

TIMBER AND STONE LAND ENTRIES.

Two thousand one hundred and one entries, embracing 297,735.50 acres, were made under the timber and stone land act of June 3, 1878 (*chiefly* timber-land entries), being an increase of 1,373 entries and

202,498.48 acres over the previous year, in the States of California, Oregon, and Nevada, and Washington Territory, to which States and Territory only the act is applicable.

It is a condition of this act that the land shall be valuable chiefly for timber, but unfit for cultivation. Entries are restricted to 160 acres for any one person or association of persons.

The restrictions and limitations of the act are flagrantly violated. Information is in my possession that much of the most valuable timber land remaining in the possession of the Government on the Pacific coast is being taken up by home and foreign companies and capitalists through the medium of entries made by persons hired for that purpose.

I have found it necessary to suspend all entries of this class and to direct an investigation in the field with a view to the procurement of evidence in specific cases to authorize the cancellation of illegal entries and the prosecution of guilty parties.

TIMBER LANDS.

The rapid decrease in the timber areas of the country invites attention to present methods of appropriation of public timber lands, and suggests the expediency of some modification of the laws by which remaining forests may be better preserved, or a more adequate revenue derived from their sale.

The present and increasing value of timber is an inducement to individuals and companies to make large investments with a view to the control of the timber product, and the further enhancement of prices resulting from such control. The facility with which the restrictions of the public land laws are evaded is a temptation to the illegal acquirement of title for the purpose of such investments.

It would, perhaps, be of little moment how soon the public title to lands should pass to private holders, since that is the ultimate purpose of the laws, if the further purpose of the laws that public lands should in the original instance be widely distributed among the people could also be secured. But if this cannot be done, and the systems of public disposal are to result, as they now do, in permitting capitalists to indirectly obtain great bodies of public land, it is certainly but provident for the United States to require a price to be paid for its timber lands somewhat commensurate to their value.

Several propositions have been presented in Congress looking to a change in the methods of disposing of lands valuable chiefly for timber. The subject is one of difficulty, and it is important that the wisest action be taken. I am of opinion that such lands should be reserved by law from ordinary disposal, and sold only after appraisement and upon sealed bids, at not less than the appraised price. It would be proper that an act to such effect should not deprive settlers on the public lands of the right to take timber for domestic purposes or the support of their improvements.

SWAMP LANDS.

The swamp-land selections reported to this office for adjudication the past year aggregate 449,188.17 acres, making a total of 70,445,957.58 acres selected under the swamp-land grant at the close of the fiscal year.

Lists embracing 686,295.53 acres have been approved, making a total of 56,455,467.56 acres certified or patented to the several States. The unadjudicated claims still pending amount to 14,000,000 acres, the same as at the commencement of the fiscal year.

RHODES HOUSE OXFORD

SWAMP-LAND INDEMNITY.

Twenty-eight thousand four hundred and ninety-six acres were patented as indemnity for swamp lands disposed of by the United States between the years 1850 and 1857, under military warrant and scrip locations, making a total of swamp indemnity lands patented to the several States of 504,812.99 acres.

Cash indemnity claims were approved for payment to the amount of $90,333.38.

The act of March 2, 1855, extended to March 3, 1857, confirmed all swamp selections previously made, whether or not properly so made, for lands intended to be granted, and also provided indemnity in lands or money for tracts disposed of by the United States subsequent to the swamp-land grant and prior to March 3, 1857, which should be found to have been swampy in character at the date of the swamp-land act.

The effect of the indemnity provision has been to incite claims by States or their agents or assigns to claims for land or cash indemnity for a large quantity of the public land disposed of under general laws between 1850 and 1857 in the swamp-grant States. The validity of these claims is in many cases of a questionable character, and the allowance of them is a considerable and constant draft upon the Treasury. I have been compelled to reject probably the larger portions of the selections presented. If the State agents would exercise more discrimination in presenting cases much labor would be saved. The appropriation available for the examination of claims for swamp lands and swamp indemnity has permitted the employment during the year of but four special agents for this important service. The Southern States, to which the swamp grant in part applies, are urging the adjustment of their claims, and much progress has been made during the past year in their settlement. A portion of the force of the swamp division has been engaged in perfecting the records of the office, and preparing indexes, a fact not elsewhere referred to in this report.

PRIVATE LAND CLAIMS.

Eight confirmed private land claims in California have been patented, and nineteen others docketed, but not finally disposed of.

Twenty-six private claims in Louisiana, Florida, and Illinois, and three in New Mexico, have been passed to patent. One in Louisiana and one in New Mexico presented for recognition have been rejected. Twenty-seven confirmed claims in New Mexico and Colorado, and forty-one in Louisiana and Florida, are awaiting final action. Three claims within the Las Animas grant in Colorado have been adjudicated. Six approved and twenty-four rejected claims within the same grant remain to be considered.

Scrip has been issued for two claims in Louisiana under the act of June 22, 1860, and subsequent acts. Three have been reported to Congress. Three hundred and six entries have been allowed on private land-scrip locations, and ninety-three are pending.

Thirty-nine donation claims in Oregon and Washington Territory have been patented, twenty-six in New Mexico rejected, and five hundred and forty-seven in Oregon, Washington Territory, and New Mexico remain to be adjudicated. Eighty-four Indian claims have been patented.

Several thousand private land claims in Florida and Louisiana, and a smaller number in the several States of Missouri, Alabama, Mississippi, Arkansas, Illinois, Indiana, and Michigan, which have been con-

firmed by Congress, by various Boards of commissioners, or by the courts, still remain undisposed of.

In Florida.—Plats of confirmed claims in Florida which have been surveyed by the United States are on file in this office, but it is found in many instances that the subsisting surveys embrace more land than was included in the confirmations.

All lands within the lines of these surveys are regarded as reserved until the claims are finally adjudicated. Meanwhile claimants treat the whole as their private property and make sales and conveyances. Numerous conflicts between settlers seeking title under the public land laws, and grant claimants or their assignees, arise from this unsettled condition.

It is desirable and important that sufficient provision be made by Congress for an investigation of these surveys in the field, and for such examination and investigation of the titles and claims in other respects as may be required in the public interests.

In New Mexico, Colorado, and Arizona.—Attention is again called to the condition of private land claims in New Mexico, Colorado, and Arizona. Nearly thirty years have elapsed since the passage of the act of July 22, 1854 (10 Stat., 308), providing for the settlement of these claims through their presentation to the surveyor-general and the submission of his reports to Congress.

About seventy claims have been confirmed by Congress. Ninety-four are pending before that body, while an unknown number remains on the files of the surveyors-general.

The claims presented under the act of 1854 (and subsequent acts, extending the provisions of that act to Arizona and Colorado) are chiefly in New Mexico and Arizona, a few only being in Colorado.

The presentation to surveyors-general of claims for confirmation, whether the same are finally confirmed or not, operates as a statutory reservation of the land claimed, although the situation of the land and the quantity embraced in the claims are ill-defined and uncertain.

The existence of these undetermined and unsettled claims is a perpetual menace to the industrial occupation of the soil. Settlements are retarded and to a large degree practically inhibited owing to the liability that the land upon which a settlement is made may fall within the limits of some unconfirmed and unsurveyed grant. There is a further liability of the assertion of claims heretofore unknown. The increasing value of land, owing to increased facilities of communication and the general settlement of all the Territories, invites the assertion of such claims, and is an incentive to the manufacture of fraudulent titles. The lapse of time favors claims of a doubtful character and especially favors a broad expansion of original claims. Complaints have been made that grants have been confirmed by Congress, or surveyed and patented under Congressional confirmations, for a far greater quantity of land than is embraced in the grants.

The inadequacy of the present system of adjustment is shown by the statement just made that only seventy claims out of a possible thousand have been settled, while less than one hundred more have been in any manner reported for action, and this, as to number, is the result of thirty years' operation of the system. In other respects the results of the system are even less satisfactory. Repeated applications have been made for the institution of judicial proceedings to set aside patents already issued, either on the ground of fraud in original titles or of a fraudulent enlargement of boundaries. A suit is now pending for the recovery to the United States of nearly 2,000,000 acres embraced in a single confirmation by Congress upon a surveyor-general's report.

This situation illustrates a more fundamental defect in the present system than that of mere interminable delay. It is that the machinery employed does not admit either of that scrutiny of title or of that accuracy in the determination of boundaries which the public safety demands. The surveyor-general is fully occupied with the ordinary duties of his office. He cannot give the time required for a thorough investigation of these cases even if he were always qualified for the duty and interests of such magnitude could properly be confided to the intelligence, discretion, or integrity of a single individual.

The determination of the boundaries and extent of claims rests almost wholly with deputy surveyors. They are only nominally officers of the the United States. Actually, they are contractors. They are not required to exercise judicial functions, and cannot be expected to devote much of their own time to a critical investigation of boundaries shown them by interested claimants. For several years past, and until the beginning of the present fiscal year, after a claim had been favorably reported by the surveyor-general, the first step was to make what is called a "preliminary survey." This was not considered a finality. It did not purport to be founded upon any accurate basis. It purported only to describe boundaries which parties interested in extending claimed limits had pointed out. When a claim is confirmed by Congress, the confirmation may carry the survey as reported, and thus the merely preliminary survey becomes a Congressional grant.

These preliminary surveys were not required to be examined by this office, but in contemplation of law were simply transmitted to Congress as exhibits to the surveyor-general's reports. But if they had been examined here, such examination would, of necessity, have been a superficial one. Under the present system this office is without proper means to judge of the substantial correctness of surveys of private land claims. Minor errors, incident to any survey, may be detected. But whether the deputy surveyor found the true boundaries of the grant, or whether the monuments accepted as being the monuments called for by the grant, were such in fact, are matters wholly beyond the facilities of this Department to ascertain from any data furnished by the surveyor-general's reports.

The unauthoritative character of preliminary surveys has repeatedly been stated to Congress in my annual reports and in reports upon special cases.

An instance has been called to my attention where the original claim was for a quantity of land shown upon a plat presented to the surveyor-general as containing one square league, or less than 5,000 acres, and described as having fixed natural boundaries which claimants stated were well known and easily identified. And yet, upon the assignment of this claim to other parties a preliminary survey was obtained purporting to show identically the same boundaries, but embracing an area exceeding 300,000 acres.

The title papers transmitted to Congress for its judgment upon the validity of claims are not the originals or purported originals on file in the surveyor-general's office, but are copies merely. It is manifestly impossible for an opinion to be formed upon the authenticity of papers by an inspection of copies. Moreover, the organization and duties of legislative committees do not admit of that kind of scrutiny and investigation which claims of this character should receive before a confirmation of title to unknown quantities of land is made.

The reluctance of Congress to continue the confirmation of private *land claims* in New Mexico and Arizona, in view of the difficulties and

uncertainties involved in such procedure, has been marked by its omission in late years to take action upon such claims, and by various propositions looking to some different mode of settlement.

I have heretofore been disposed to regard with favor the proposition of sending these claims to the courts, but upon a more mature consideration I am satisfied that the courts, with their present organization, would be unable to cope with the vast volume of additional business which would be thrown upon already overcrowded dockets. It is also doubtful if methods of judicial procedure are adequate to the proper investigation of such claims. The evidence to be produced is generally *ex parte*. Conflicting interests are apt to be removed, or a confirmation effected, through which the demands of all parties are satisfied out of a larger portion of the public domain. Settlers having adverse claims are not usually able to pay the expenses of a legal contest with wealthy grant claimants. The United States attorneys are occupied with their general duties, and provision is not made by which they can be compensated for the special and extraordinary labor that would be entailed by the proper defense of the public interests in such suits. The appropriations for special counsel do not permit the payment of fees approximate to those which experienced and able lawyers can obtain from private claimants of great bodies of the public lands.

The examination of these claimed titles is a work of protracted and patient labor, requiring in many cases detective experience and skill as well as legal acumen and learning, and in all cases close and painstaking individual effort. The nature and validity of claims being settled, questions of boundary and extent are to be determined, and such properly require investigations in the field. Usually testimony upon these points is furnished chiefly or wholly by claimants. It is obvious that a better knowledge of facts than can be obtained from such sources is essential to a just adjudication.

The old population of New Mexico and Arizona is permanent in its character. The lands occupied and cultivated by these people for generations are well known. The location of original claims in their neighborhood is ascertainable. I believe it possible, through a personal examination of monuments and boundaries by responsible officers of the Government, and by taking testimony in the neighborhood, to establish the limits of grants with a greater degree of accuracy than has yet been attained or that can be attained in any other manner.

My best conclusion is that a commission should be appointed for each of the Territories named, the duties of which should embrace a thorough examination and investigation of the foundations of all alleged private land claims in these Territories, together with an actual investigation of boundaries and limits, and that all claims before Congress or this office, as well as those depending before the surveyors general, should be remanded to such commission for examination and decision with proper appeal for review upon error of law.

Much care would be requisite in framing such measure, which should not, I think, invest the commissioners with so great or irresponsible powers of confirmation as given to previous boards, but should require as preliminary to any result the most thorough research and exhaustive practical investigation.

The obligations of treaty stipulations are apt to be magnified into a recognition of property rights that had no existence under Spanish or Mexican law, and into the support of speculative schemes to dispossess the United States of its own property. The time has come when, in my opinion, the rights and interests of the United States should be

faithfully and vigorously defended against unjustifiable assaults under cover of pretended foreign titles.

I further deem it a matter of great importance that the time within which claims not heretofore presented to surveyors general may be filed before any tribunal should be limited to a brief period, and that all claims not presented within such period should be definitely barred.

In view of the great length of time that has already been allowed for this purpose, I think that further time should be limited to two years.

RAILROAD LAND GRANTS.

The construction of 1,210.68 miles of land-grant railroad was reported during the year, making a total of 17,449.78 miles of road reported as constructed under all grants to June 30, 1883. This aggregate includes 205 miles in the Indian Territory, and 342.87 miles in the State of Texas for which there is no grant, such construction being an incident to land-grant lines proper.

Four hundred and seventy-seven thousand seven hundred and forty and twenty-four one-hundredths acres were certified or patented under railroad grants during the year, and 440,856.52 acres were patented for wagon-roads, an increase in patents for railroads and wagon-roads over the previous year of 742,190.10 acres.

Lists of railroad selections aggregating 3,070,453.41 acres are awaiting examination, being an increase over the previous year of 1,112,060.62 acres.

The number of settlement claims within the granted or indemnity limits of the various railroad grants that were awaiting original or final action at the close of the year was 6,891, an increase of 1,327 over the arrears of the previous year. Of the total number pending 1,464 had received some action, and 5,427 had not been reached for examination.

RIGHT-OF-WAY RAILROADS.

The number of railroad companies recognized as entitled to a right of way through the public lands to land for station purposes, and to take timber and other material from public lands for the construction of their roads, was at the close of the fiscal year one hundred and sixty-three, located in the various public-land States and Territories.

FORFEITURE OF RAILROAD LAND GRANTS.

The following tables show the grants made to several States and corporations for roads that have not been constructed within the time required by law, classified for reference and convenience under four heads, viz:

1. Where the roads have been completed but not within the time required.
2. Where the roads have not been completed within time but which are in course of construction.
3. Where the roads have been partly completed and construction suspended.
4. Where no part of the roads has been constructed.

Twelve grants fall within the first classification, eight in the second, nine in the third, and twelve in the fourth.

Statement showing States and corporations to which grants have been made to aid in the construction of railroads which have been completed, but not within the time required by law.

State or corporation to which grant was made.	Name of railroad.	Date of act making grant and acts extending time for completion of road.	Statutes.	Page.	Date when road should have been completed.	Number of miles of road completed before expiration of grant.	Number of miles of road completed after expiration of grant.	Total length of road.	Remarks.
								Miles.	
Florida	Pensacola and Georgia	May 17, 1856	11	15	May 17, 1866	.....	161	311	The date of the completion of 150 miles of this road is not known to this office. It was, however, constructed prior to the 161 miles given as completed since the expiration of the grant.
	Florida, Atlantic and Gulf Central	May 17, 1856	11	15	May 17, 1866	.....	59	59	Date of completion not known.
Missouri	Saint Louis, Iron Mountain and Southern.	July 4, 1866	14	83	July 1, 1871	20	77.84	97.84	Road not built on line of definite location.
Michigan	Port Huron and Lake Michigan	June 3, 1856	11	21	June 3, 1866	.....	.....	205	Date of completion not known to this office.
	Jackson, Lansing and Saginaw	June 3, 1856 July 3, 1866	11 14	21 78	June 3, 1873	188.10	73.27	261.37	
Wisconsin	West Wisconsin, now Chicago, Saint Paul, Minneapolis and Omaha.	June 3, 1856 May 5, 1864 July 13, 1868	11 13 15	20 66 257	May 5, 1869 May 5, 1872	217.09	39	256.09	
Minnesota	Saint Vincent Extension Saint Paul and Pacific, now Saint Paul, Minneapolis and Manitoba.	Mar. 3, 1857 July 12, 1862 Mar. 3, 1865 Mar. 3, 1873	11 12 13 17	195 624 526 631	Dec. 3, 1873	140	174	314	
	Brainerd Branch Saint Paul and Pacific, now Western Railroad.	Mar. 3, 1857 Mar. 3, 1865 Mar. 3, 1873	11 13 17	195 526 631	Dec. 3, 1873	.....	54.21	54.21	
	Southern Minnesota Railway Extension.	July 4, 1866	14	87	Feb. 25, 1877	$149\frac{1844}{2000}$	$130\frac{47}{2000}$	$279\frac{1844}{2000}$	
	Hastings and Dakota	July 4, 1866	14	87	Mar. 7, 1877	74	128.1	202.1	
	Lake Superior and Mississippi	May 5, 1864	13	64	May 5, 1872	30	124.42	154.42	
New Orleans, Baton Rouge and Vicksburg.	New Orleans Pacific, assignee	Mar. 3, 1871	16	573	Mar. 3, 1876	.....	328	328	

Statement showing States and corporations to which grants have been made to aid in the construction of railroads which have not been completed within the time required by law, but which are in course of construction.

State or corporation to which grant was made.	Name of railroad.	Date of act making grant and acts extending time for completion of road.	Statutes.	Page.	Date when road should have been completed.	Number of miles of road completed before expiration of grant.	Number of miles of road completed after expiration of grant.	Total length of constructed road.	Number of miles of road uncompleted at expiration of grant.	Number of miles of road uncompleted June 30, 1883.	Remarks.
Florida	Atlantic, Gulf and West India Transit.	May 17, 1856	11	15	May 17, 1866	155	70.97	225.97	150	79.03	
Louisiana	Vicksburg, Shreveport and Texas.	June 3, 1856	11	18	June 3, 1866	94	.....	94	95	95	
Michigan	Ontonagon and Brulé River.	June 3, 1856	11	21	June 3, 1866	.....	20	20	75	55	
Wisconsin	North Wisconsin, now Chicago, Saint Paul, Minneapolis and Omaha.	June 3, 1856 May 5, 1864	11 13	20 66	May 5, 1869	.....	200	200	240	40	
Northern Pacific	Northern Pacific	July 2, 1864 May 7, 1866 July 1, 1868 Apr. 10, 1869 May 31, 1870	13 14 15 16 16	365 335 255 57 378	July 4, 1879	530.5	1,104.58	1,635.08	1,812.58	708	The date given for the completion of this road is that fixed by the decision of the Secretary of the Interior, dated June 11, 1879. (See General Land Office Report for 1879, p. 109.) Since June 30 the company has completed about 150 miles additional in Montana, which with that already completed forms a continuous line from Superior, Wis., to Wallula Junction, Wash. It has also constructed 42 miles, extending from Portland, Oreg., to Kalama, Wash., leaving 516 miles of its road now unconstructed, to wit: From Superior to the mouth of the Montreal River in Wisconsin, 76 miles; from Wallula Junction, Wash., to Portland, Oreg., 225 miles; and the branch line in Washington Territory, 215 miles. So far as known to this office no part of the main line between Wallula Junction and Portland, nor of the branch line, is in process of construction.

Oregon and California.	Oregon and California.	July 25, 1866 June 23, 1868	14 15	239 80	July 1, 1880	197	45	242	118	73	
California and Oregon.	California and Oregon.	July 25, 1866 June 25, 1868	14 15	239 80	July 1, 1880	152	.....	152	136	136	
Atlantic and Pacific.	Atlantic and Pacific...	July 27, 1866	14	292	July 4, 1878	125	612	737	2,301	1,689	No official evidence of the construction of 162 miles of the amount given as constructed since the expiration of the grant has been filed, although the same is in operation. The number of miles given as unconstructed includes both main and branch lines.

Statement showing States and corporations to which grants have been made to aid in the construction of railroads which have been partly completed and construction suspended, so far as known to this office.

State or corporation to which grant was made.	Name of railroad.	Date of act making grant and acts extending time for completion of road.	Statutes.	Page.	Date when road should have been completed.	Number of miles of road completed before expiration of grant.	Number of miles of road completed after expiration of grant.	Total length of constructed road.	Number of miles of road uncompleted at expiration of grant.	Number of miles of road uncompleted June 30, 1883.	Remarks.
Alabama	Selma, Rome, and Dalton	June 3, 1856	11	17	June 3, 1866	100	43.93	143.93	67.35	23.42	Road not built on line of definite location.
Alabama	Mobile and Girard	June 3, 1856	11	17	June 3, 1866	.....	.....	84	.....	139	Date of construction not known, no official evidence thereof being on file.
Michigan	Marquette and Ontonagon	June 3, 1856 June 18, 1864 May 20, 1868	11 13 15	21 137 252	Dec. 31, 1872	52	.....	52	46	46	
Michigan	Northern Central, Michigan	June 3, 1856 July 3, 1866	11 14	21 78	June 3, 1873	.....	60	60	80	20	
Iowa	Sioux City and Saint Paul	May 12, 1864	13	72	Sept. 20, 1881	56 25	.....	56.25	$26\frac{2}{3}\frac{5}{0}$	$26\frac{2}{3}\frac{5}{0}$	
Wisconsin	Wisconsin Central	May 5, 1864 Apr. 9, 1874	13 18	66 28	Dec. 31, 1876	248	9	257	93	84	
Oregon Central	Oregon Central	May 4, 1870	16	94	May 4, 1876	*25 †122$\frac{1}{2}$	.....	47$\frac{1}{2}$	97	97	
Southern Pacific	Southern Pacific (main line)	July 27, 1866	14	202	July 4, 1878	232	240	472	324	84	The 240 miles of road given as constructed since the expiration of the grant extend from Mojave, Cal., to The Needles on the Colorado River, and although this portion of the road is in operation, no official evidence of its construction has been filed.
Texas Pacific	Texas and Pacific	Mar. 3, 1871 May 2, 1872	16 17	573 59	May 2, 1882	705	.....	705	778	778	Although 524 miles of the amount given as completed is in operation, no official evidence of its construction has been filed. The completed road is all in the State of Texas, where there are no United States lands.

* Main line.

† Branch.

Statement showing States to which grants have been made to aid in the construction of railroads none of which have been constructed in whole or in part.

Name of State to which grant was made.	Name of railroad.	Date of act making grant.	Statutes.	Page.	Date when road should have been completed.	Remarks.
Mississippi	Gulf and Ship Island	Aug. 11, 1856	11	30	Aug. 11, 1866	Map of definite location filed November 27, 1866.
	Tuscaloosa to the Mobile Railroad	Aug. 11, 1856	11	30	Aug. 11, 1866	No map of definite location filed.
Alabama	Mobile to New Orleans	Aug. 11, 1856	11	30	Aug. 11, 1866	Do.
Louisiana	do					
Alabama	Coosa and Tennessee	June 3, 1856	11	17	June 3, 1866	Map of definite location filed January 18, 1859.
	Coosa and Chattooga	June 3, 1856	11	17	June 3, 1866	Map of definite location filed September 20, 1858.
	Memphis and Charleston	June 3, 1856	11	17	June 3, 1866	State refused to accept grant.
	Elyton and Beard's Bluff	June 3, 1856	11	17	June 3, 1866	No map of location filed.
	Savannah and Albany	Mar. 3, 1857	11	195	Mar. 3, 1867	Do.
Louisiana	New Orleans to the State line in the direction of Jackson, Miss.	June 3, 1856	11	18	June 3, 1866	State declined to accept grant.
Arkansas	Iron Mountain	July 4, 1866	14	83	July 1, 1871	Road never definitely located.

The following tables show the grants for roads not completed in time in cases where the granting acts contain similar provisions relative to conditions or the reversion of lands to the United States. These are classified under the following heads:

1. Where the grant provides that if any portion of the roads be not completed within the time fixed, no further sale shall be made and the lands unsold shall revert to the United States.

2. Where the grant provides that if the roads be not completed within the time fixed, no further patents shall be issued to the railroad company and no further sale shall be made, and the lands unsold shall revert to the United States.

3. Where the grant provides that if the road should not be completed in time the lands not patented should revert to the United States.

4. Where the grant provides that if the road should not be completed within ten years the lands not patented should revert to the State, and if the State should fail to complete the road within five years after the expiration of the ten years the land undisposed of should revert to the United States.

5. Where the grant provides that if the companies fail to file their assent to the act, or to complete their roads as provided therein, the act shall be null and void, and all lands not patented to the company or companies at the date of such failure shall revert to the United States.

6. Where the provision is that the company should complete a section of twenty or more miles within two years and the entire road within six years.

7. Where it is provided that if the companies make any breach of the conditions of the grant, Congress may do any and all acts necessary to secure the speedy completion of the roads.

Statement showing States to which grants have been made to aid in the construction of railroads which have not been completed within the time required by law, the grants to which provide that if any of the roads be not completed within the time therein fixed no further sales of the lands granted for such road, or roads, shall be made, and the lands unsold shall revert to the United States.

State to which grant was made.	Name of railroad.	Date of act making grant and acts supplemental thereto.	Statutes.	Page.
Mississippi	Gulf and Ship Island	Aug. 11, 1856	11	30
	Tuscaloosa to the Mobile Railroad	Aug. 11, 1856	11	30
Alabama	Mobile to New Orleans	Aug. 11, 1856	11	30
Louisiana	do			
Alabama	do			
	Selma, Rome and Dalton	June 3, 1856	11	17
	Coosa and Tennessee	June 3, 1856	11	17
	Coosa and Chattooga	June 3, 1856	11	17
	Elyton and Beard's Bluff	June 3, 1856	11	17
	Memphis and Charleston	June 3, 1856	11	17
	Mobile and Girard	June 3, 1856	11	17
	Savannah and Albany	Mar. 3, 1857	11	195
Florida	Atlantic, Gulf and West India Transit	May 17, 1856	11	15
	Pensacola and Georgia	May 17, 1856	11	15
	Florida, Atlantic and Gulf Central	May 17, 1856	11	15
Louisiana	Vicksburg, Shreveport and Texas	June 3, 1856	11	18
	New Orleans to the State line in the direction of Jackson, Miss.	June 3, 1856	11	18
Michigan	Ontonagon and Brulé River	June 3, 1856	11	21
	Port Huron and Lake Michigan	June 3, 1856	11	21
	Marquette, Houghton and Ontonagon	June 3, 1856	11	21
		Mar. 3, 1865	13	520
	Jackson, Lansing, and Saginaw	June 3, 1856	11	21
		July 3, 1866	14	78
	Northern Central Michigan	June 3, 1856	11	21
		July 3, 1866	14	78

Statement showing States to which grants have been made, &c.—Continued.

State to which grant was made.	Name of railroad.	Date of act making grant and acts supplemental thereto.	Statutes.	Page.
Wisconsin	West Wisconsin	June 3, 1856	11	20
		May 5, 1864	13	66
	North Wisconsin, now Chicago, Saint Paul, Minneapolis and Omaha.	June 3, 1856	11	20
		May 5, 1864	13	66
Minnesota	Brainerd Branch, Saint Paul and Pacific, now Western Railroad.	Mar. 3, 1857	11	195
		Mar. 3, 1865	13	526
	Saint Vincent Extension, Saint Paul and Pacific, now Saint Paul, Minneapolis and Manitoba.	Mar. 3, 1857	11	195
		Mar. 3, 1865	13	526

Statement showing States to which grants have been made to aid in the construction of railroads which have not been completed within the time required by law, the grants to which provide that if the roads be not completed within the time therein fixed no further patents shall be issued to the railroad company, and no further sale shall be made, and the lands unsold shall revert to the United States.

State to which grant was made.	Name of railroad.	Date of act making grant.	Statutes.	Page.
Wisconsin	Wisconsin Central	May 5, 1864	13	66
Minnesota	Lake Superior and Mississippi	May 5, 1864	13	64

Statement showing States to which grants have been made to aid in the construction of railroads which have not been completed within the time required by law, the grants to which provide that if the roads be not completed within the time therein fixed the lands not patented shall revert to the United States.

State to which grant was made.	Name of railroad.	Date of act making grant.	Statutes.	Page.
Minnesota	Southern Minnesota Railway Extension	July 4, 1866	14	87
	Hastings and Dakota	July 4, 1866	14	87
Missouri	Saint Louis, Iron Mountain and Southern	July 4, 1866	14	83
Arkansas	Iron Mountain	July 4, 1866	14	83

Statement showing grant made to aid in the construction of a railroad, which has not been completed within the time required by law, wherein it is provided that if the road be not completed within ten years the lands not patented shall revert to the State for the purpose of securing the completion of the road, and should the State fail to complete the road within five years after the ten years aforesaid, then the lands undisposed of shall revert to the United States.

State to which grant was made.	Name of railroad.	Date of act making grant.	Statutes.	Page.
Iowa	Sioux City and Saint Paul	May 12, 1864	13	72

Statement showing corporations to which grants have been made to aid in the construction of railroads which have not been completed within the time required by law, the grants to which provide that if the companies fail to file their assent or complete their roads as prorided therein the act shall be null and void, and all lands not conveyed by patent to the company or companies, as the case may be, at the date of such failure, shall revert to the United States.

Corporation to which grant was made.	Date of act making grant.	Statutes.	Page.
California and Oregon Railroad Company	July 25, 1866	14	239
Oregon and California Railroad Company	July 25, 1866	14	239

Statement showing corporations to which grant has been made to aid in the construction of a railroad, which has not been completed within the time required by law, wherein it is provided that the company shall complete a section of twenty or more miles of its road within two years and the entire road within six years from the same date.

Corporation to which grant was made.	Date of act making grant.	Statutes.	Page.
Oregon Central Railroad Company	May 4, 1870	16	94

Statement showing corporations to which grants have been made to aid in construction of railroads which have not been completed within the time required by law, the grants to which provide that if the companies make any breach of the conditions thereof Congress may do any and all acts necessary to secure the speedy completion of the roads.

Corporation to which grant was made.	Date of act making grant.	Statutes.	Page.
Northern Pacific Railroad Company	July 2, 1864	13	365
Atlantic and Pacific Railroad Company	July 27, 1866	14	292
Southern Pacific Railroad Company	July 27, 1866	14	292
Texas Pacific Railroad Company, now Texas and Pacific Railway Company	Mar. 3, 1871	16	573
New Orleans, Baton Rouge and Vicksburg Railroad Company, of which the New Orleans Pacific Railway Company claims to be the assignee	Mar. 3, 1871	16	573

The question of declaring a forfeiture of the foregoing grants or of any of them, is deemed an appropriate one for legislative consideration.

The time fixed in the granting acts for the completion of the roads expired in some instances in 1866, and in other cases at later periods down to 1882.

In the absence of Congressional action lands have been certified or patented accordingly as roads have been constructed whether within or out of the time prescribed. Your immediate predecessor suspended this practice prior to the meeting of Congress in December, 1880, but as no legislative action was taken you have held that under the decision of the Supreme Court of the United States you had no right to declare a forfeiture or to further suspend the issue of patents for lands along the constructed portions of roads even if the same had not been built within the prescribed time. The remaining lands are continued in the reservations established by law or under withdrawals made for the protection of the grants. Meanwhile settlers have entered upon some of these lands and are anxious to know whether they must look to the railroad companies or to the United States for their titles. The public

demand for a definite settlement of the question whether a forfeiture is to be enforced in any of these cases is constantly pressed upon my attention. I consider it of very great importance that the earliest possible action should be taken either to revive the grants or to declare them forfeited. If it be the judgment of Congress that the grants should be revived, Congress may unquestionably prescribe the conditions of such revival; and if such action should be taken I suggest that all actual settlers on the land be saved and secured in their rights and claims to land embraced in their settlements and improvements at the date of any such revival of the railroad grant.

MILITARY BOUNTY-LAND WARRANTS.

The area represented by military bounty-land warrants issued under the acts of 1847 to 1855, inclusive, located and not heretofore reported, was 48,680 acres, computed at $1.25 per acre. Twenty-one thousand two hundred and twenty-three warrants are now outstanding, calling for 2,411,700 acres.

STATE SELECTIONS.

One hundred and seventy-eight thousand six hundred and twenty-four and sixty-one one-hundredths acres were approved to the several States entitled thereto under the internal-improvement, agricultural college, university, and school-indemnity grants.

TOWN SITES.

Seventeen town sites and 230 entries of town lots were approved for patent.

INDIAN LANDS AND MILITARY RESERVATIONS.

The proceedings of the Land Department in respect of lands embraced in sundry Indian and military reservations will be found in detail in this report.

ACCOUNTS.

Thirty-six hundred and seventy accounts were examined and audited, covering $9,410,031.42.

The adjusted accounts embrace receipts amounting to $6,247,721.21 and disbursements to the amount of $3,162,310.21.

CERTIFICATES OF DEPOSIT ON ACCOUNT OF SURVEYS.

The amount covered by certificates of deposit on account of surveys examined and accepted in payment for public lands during the year was $1,720,800.70.

The amount deposited for surveys under the individual deposit system was $1,162,935.58

REPAYMENTS.

Five hundred and sixty-six repayment claims for lands erroneously sold were adjusted and approved, amounting to $57,739.64.

STATE FUND ACCOUNTS.

The amount reported to the First Comptroller as accruing to the several States entitled by acts of admission into the Union to 5 per cent. of the net proceeds of sales of the public lands, was $134,133.22.

SURVEYS.

The area of public surveys executed was as follows:

	Acres.
Surveys of public lands	54,129,400.28
Surveys of Indian lands	512,098.53
Surveys of private land claims	642,233.98
Total number of acres surveyed during the fiscal year	55,283,732.79

Two thousand six hundred and seventy township plats and field notes of surveys of public lands and private land claims were examined during the year, and three hundred and fifty-one surveying contracts entered into by surveyors general were examined and approved.

PUBLIC LAND STRIP.

The boundaries of the tract of unorganized territory south of the Kansas and Colorado State lines, and between the Indian Territory and New Mexico, have been established and exterior township lines surveyed. Subdivisional township surveys yet remain to be made.

Settlers are commencing to enter this territory, and means should be provided by which they may be enabled to secure titles under the public land laws and also to be protected in person and property by the laws of the land. The territory is not at present attached to any judicial district. In my last annual report I recommended that it be attached to the surveying district of New Mexico for the purpose of subdivisional township surveys and the disposal of the land. The land is, however, nearer the recently established Southwestern land district in the State of Kansas, and it would be more convenient for settlers to make their entries at Garden City, in that district, than at the Santa Fé land office in New Mexico. I recommend, therefore, the attachment of this public land strip to the Southwestern land district in Kansas, and, as there is no surveyor general in Kansas, I also recommend that authority be given the Secretary of the Interior to cause the subdivisional surveys to be made under the general appropriation for the surveying service.

ALLOTMENT LANDS FOR UTE INDIANS.

The surveys made previous to the last fiscal year of lands for allotment to the Southern Utes in Colorado and New Mexico, amounting to 326,675.56 acres, have been examined and approved. In the past year surveys have been returned of 148,255.65 acres.

Two hundred and eighty-seven thousand one hundred and forty-seven and seventy-six one-hundredth acres have been surveyed within the Uintah Reservation in Utah for allotment to the White River Ute Indians.

Some progress has been made in the field work of surveys in Utah for allotment to the Uncompahgre Utes, but no returns have been received.

INDIAN RESERVATIONS.

A contract has been entered into for the survey and subdivision of seventeen townships in the late Uncompahgre Reservation in Colorado.

The survey of the boundary between the Crow Reservation and Crow ceded lands in Montana, and surveys of Crow lands for allotment, have been contracted for. The survey of the boundary lines has not yet been executed. Some progress has been made in field surveys for allotment.

The lands within the old Sioux Indian reservation west of Big Stone Lake in Dakota, have been resurveyed, and the western boundary line retraced, the original surveys having been reported fraudulent. The area shown by the original survey was 115,157.68 acres, and by the resurvey 137,648 acres, making an increase by the resurvey of 22,540.32 acres.

NORTHERN BOUNDARY OF WYOMING.

The survey of the northern boundary of Wyoming has been examined in the field by a surveyor detailed for that duty by the Superintendent of the United States Coast and Geodetic Survey, and the boundary line found correctly established.

MILITARY RESERVATIONS.

The Fort Larned reservation has been surveyed and subdivided as other public lands, and the necessary steps taken for the appraisement and sale of the land to actual settlers as provided by law.

A statement of military reservations created, enlarged, reduced, modified, or restored to the public domain during the year, will be found in the appropriate place in this report.

GENERAL SURVEYING OPERATIONS.

For the details of surveying operations in the several surveying districts, and much valuable information in respect to the public lands in said districts, reference is made to the accompanying reports of the sixteen surveyors-general.

DESTRUCTION OF MONUMENTS.

The frequent removal or destruction of corners marking the public surveys render it necessary for me to call attention to the absence of any statute bearing upon the matter in cases where the surveys have been completed.

The protection of these monuments is of great importance both to settlers and the Government, and I recommend the passage of an act by Congress making the willful removal or destruction of monuments or corners of public surveys an offense, and providing proper penalties therefor.

FALSE AND FRAUDULENT SURVEYS.

Under existing laws deputy surveyors are liable on their bonds for the execution of false or fraudulent surveys, and are also liable to the penalties of perjury for falsely taking and subscribing an oath that surveys have been faithfully and correctly made. These penalties are ineffective to prevent gross frauds in the surveying service. Recoveries upon bonds are rarely possible, and the difficulty in obtaining convictions for perjury in general cases is well known.

I am of the opinion that punishment by fine and imprisonment for making false and fraudulent returns of public surveys is a matter of necessity for the better protection of the public interests, and I recommend the passage of an act to that effect.

RESURVEYS.

It often becomes necessary to resurvey townships which have been erroneously surveyed, or where the corners marking the surveys have

become obliterated. The annual appropriations for the surveying service are not deemed applicable to such resurveys. Frequent applications are also made for the survey of beds of meandered lakes, sloughs, and ponds, and for the extension of surveys over tracts omitted from survey for some cause in the progress of the general survey of townships. It was formerly the practice to survey and dispose of tracts falling within the above-named classes and which were considered public land of the United States, but owing to the difficulty of determining questions of title, and doubt as to the authority for making surveys under current appropriations, such practice was discontinued by my immediate predecessor, and I have not felt authorized to renew it without legislative sanction.

There are many cases of this character in which, for the purpose of adjudicating the swamp grant to States, or other administrative purposes, it is the duty of this office to determine questions involved, and to this end an examination of the land, and its survey, becomes necessary.

I recommend that authority be given the Commissioner of the General Land Office for the resurvey of townships erroneously surveyed, or where corners have become obliterated, and for the examination and survey of the beds of meandered lakes, sloughs, and ponds, and for tracts omitted from previous surveys; such surveys or resurveys to be made under general appropriations or the individual deposit system.

MAPS AND PLATS.

Current work has included the revision and correction of the annual map of the United States (edition of 1882); the compilation of new maps of Florida and Arizona; revising and correcting maps of Alabama, Idaho, and Montana; the commencement of the compilation of new maps of Utah and Wyoming, and the revision of the map of Washington Territory; extending public surveys and railroad lines on State and Territorial maps; protracting and drawing diagrams of new surveys, and making numerous calculations for official purposes. Three hundred and seventy right-of-way railroad maps have been examined; 20 railroad land-grant maps constructed; 717 copies of railroad, private land claim, Government reservation, and district maps and township plats copied, and the tracings of 3,188 worn township plats examined preparatory to photolithographing them. Nearly 10,000 photolithographic copies of township plats have been furnished public officers, and a large number to private applicants. Indexes have been prepared to 150 volumes of field notes and plats of survey.

CORRESPONDENCE.

The number of letters received was 117,800, an increase of 26,238, or 30 per cent. over the year 1882. The number of letters written was 88,955, covering 66,384 page of letter record.

EXEMPLIFICATION OF RECORDS.

Section 461 of the Revised Statutes makes it the duty of the Commissioner to furnish all exemplifications of patents or papers on file or of record in this office that may be required by parties interested, at a price fixed by the statute, the fees so received to be paid into the Treasury. The amount received from that source the past year was $8,118.05.

This class of work increases year by year, and now involves the aggregate time of several clerks, resulting in a corresponding loss to the ordinary business of the office.

In order that this special service for the accommodation of private parties who pay the expenses of it may not be an interference with the general service, nor a tax upon the general appropriation, I respectfully recommend that provision be made by law by which the money received at this office for certified copies of plats and records shall be deemed specially appropriated for defraying the expenses of preparing such copies, the same to be disbursed by the Treasury Department in the usual manner.

PUBLIC LAND STATISTICS.

This office is constantly called upon for information from the records for the use of committees and members of Congress and other branches of the Government; State and county officials; scientific, historical, and politico-economic societies, American and foreign; immigration and agricultural associations; statistical compilers and others. The information so sought cannot usually be furnished without the expenditure of much time and labor in the examination of miscellaneous and voluminous records, and it is frequently impracticable for that reason to furnish it at all. Accuracy is hardly attainable in the preparation of statements that may be made in the unmethodical and often hasty manner indicated.

It is a matter of current official necessity, public convenience, and historical consequence, that essential public land statistics should be brought into accessible condition. To collate and arrange this data in convenient form for ready reference would probably require the work of six clerks for three years. But when done it would be done for all time, and a great saving of labor now annually required in making up statements and reports would be effected.

The compilation of data for my annual report has taken the constant labor of four clerks for three months. A call the past year for information in regard to sales of about 10,000,000 acres of Choctaw lands for use in a suit in the Court of Claims required the labor of six clerks six months to collate the facts. With a proper digest of record results the greater portion of such labor would be saved. It has never been possible, with the great need of all clerical force in current work, to even commence a systematic compendium of public land statistics.

INDEX OF LAND PATENTS.

An early provision of the Statutes (section 459 Revised Statutes) makes it the duty of the recorder to prepare alphabetical indexes of the names of patentees of public lands. This work has never been done, and a special appropriation is now necessary to carry out that provision of law.

Such indexes are needed for constant reference, and the want of them involves greater labor in searching the records upon calls for information than would be required to annually continue them when once brought up to current dates.

FIRE EXTINGUISHERS.

The recent destruction by fire of the land office and surveyor-general's office at Olympia, Wash., should invite the attention of Congress to the

necessity of making some provision against such calamity in the future. Fire-extinguishers are provided for several of the public offices and buildings in this city, including the Capitol building, and are used at army posts, barracks, navy-yards, and hospitals, at signal-service stations, Indian agencies, and other places.

A majority of land offices are located in towns in which there is no fire department. The offices are therefore exposed, and destruction by fire is not an unusual occurrence, resulting in considerable loss to the Government and expense in replacing records, and in great disadvantage to settlers and land claimants.

The use of fire extinguishers having been found expedient by other departments of the Government, and in private buildings and places of public resort, I recommend an appropriation for the purchase of a suitable number for the several local land offices and offices of surveyors general.

PROTECTION OF THE PUBLIC LANDS.

Special agents have been appointed under the act of March 3, 1883, to investigate cases of illegal and fraudulent entry and appropriation of the public lands.

The time required for organizing the special service, and the brief period elapsing between the date of the act and the close of the fiscal year, afford little opportunity for exhibiting results. There were, however, 1,237 cases of fraudulent entry reported, 702 of which were completely examined. Two hundred and ninety-six entries were canceled or held for cancellation, and twenty-six suits were recommended to set aside patents fraudulently procured. The entries which have been the subject of investigation were pre-emption, homestead, timber-culture, timber land, desert land, and placer, mineral entries, and entries under the New Mexico donation act.

Since the close of the fiscal year much further progress has been made in this work, the field of which is extensive and the necessity for it paramount.

Provision was made by the last Congress fixing the sum of $3 per day as an allowance for the traveling expenses of special timber agents in lieu of the indefinite allowance of actual expenses. This change has worked advantageously and to economy in expenditures, and I recommend that the same provision be applied to all special agents in the public land service.

RELINQUISHMENTS OF LAND ENTRIES.

The first section of the act of May 14, 1880 (21 Stat., 140), provides that when a relinquishment of any pre-emption, homestead, or timber-culture claim is filed in the local land office the land covered by such claim shall immediately become subject to entry by any other person, without awaiting the formal cancellation by this office of the relinquished entry.

The effect of this statute is to invite speculative entries for the purpose of selling relinquishments. The practical result is that when a new township is surveyed large portions of the land are at once covered with filings and entries, relinquishments of which are then offered for sale like stocks in the market. To such an extent is this proceeding carried that it is becoming difficult for an actual settler to obtain access to a quarter section of public land in desirable agricultural localities *without* buying off a pretended claim that has no foundation other than

the facility added by this statute for making and relinquishing it. The section facilitates this practice, and should be repealed.

TIMBER TRESPASS.

Special agents were employed during the year for the protection of the public timber. The number of trespass cases investigated and fully reported was 987. Three hundred and thirty-one criminal actions and two hundred and eight civil suits were commenced. Propositions of settlement were received and acted upon in 154 cases. Five hundred and sixty cases are now pending in the courts, and 294 cases are awaiting further investigation and action of this office.

The amount of timber involved in trespass cases investigated was upwards of 300,000,000 feet, at an estimated market value of over $8,000,000 and a stumpage value of nearly $2,000,000.

The amount recovered or paid into the Treasury in cases in which final action has been had was $33,260.59. The amount involved in pending suits is $208,929.28, and the amount due on accepted propositions of settlement $12,736.27.

I found it necessary to cause an investigation to be made of alleged extensive depredations near the Canadian frontier in the State of Minnesota, and anticipate as a result the discontinuance of trespasses from the Canada side.

Agents cannot be sent to such distant points, far from settlements and lines of public travel, without camping outfits and the necessary assistance for making surveys and measurements, all of which involve greater expense than can be continuously maintained under existing appropriations.

FOREST FIRES.

Several reports have been received relative to the destruction of large bodies of timber by cyclones and forest fires. Negotiations are in progress to dispose of fallen and of scorched standing timber in these cases.

Public notices, calling for information of fires and pointing out methods for preventing their spread, have been furnished special agents for posting in timber districts, and these measures and the duties performed by agents in case of fires have been the means of saving much timber during the past year. Ten extensive fires have recently occurred, in seven of which the agents have performed valuable service in checking and extinguishing the same, although greatly retarded in such work on account of the necessary limit placed upon their expenditures.

The appropriation for the timber service should permit the employment of persons under the direction of the special agents to watch against and give prompt notice of fires, and take efficient measures at the first outbreak of a fire to check its progress.

FIRES IN COAL FIELDS.

The continuous burning for a number of years of extensive coal fields in the Black Hills district, in Dakota, having been brought to my attention, I caused an investigation to be made, the reports of which have been received in two cases. These fires are in veins of coal 21 and 24 feet thick, and have been raging from three and a half to five years. At times the earth over the fire slides down and covers the face of the fire, causing it to smoulder. Pent-up gas is thus generated and ex-

plodes. This, with the settling of the earth from above, forms openings, acting in effect like chimneys, and causes the coal below to burn as in a furnace. These fields abound in lignite coal, the veins extending many miles, underlying lands valuable for agricultural purposes, and forming an important source of wealth. Iron ore of superior grade is also found in abundance in the immediate neighborhood of the coal. The agent is of opinion that excavations around the coal fields forming a cut-off would serve to extinguish the fires, and he furnishes an estimate of the probable expense in the two cases examined. I am of the opinion that prompt and vigorous measures should be adopted to arrest further loss and destruction. This can be accomplished only by a special appropriation for the purpose.

FENCING THE PUBLIC LANDS.

The practice of inclosing public lands by private persons and companies for exclusive use as stock ranges is extensively continued in States and Territories west of the Mississippi River. These ranges sometimes cover several hundred thousand acres. Special agents report that they have ridden many miles through single inclosures, and that the same often contain much fine farming land.

Summer and winter ranges in different sections of country are frequently controlled in the same manner by the same persons, who cause their cattle to be driven from one to the other, according to the season, keeping the whole of the land under fence and preventing the stock of smaller ranchmen from feeding upon any portion of it.

Foreign as well as American capital is understood to be largely invested in stock-raising enterprises involving unlawful appropriation of the public lands. Legal settlements by citizens of the country are arbitrarily prohibited, public travel is interrupted, and complaints have been made of the detention of the mails through the existence of these inclosures. Reports have been received of the use of violence to intimidate settlers or expel them from the inclosed lands.

A frequent incident to this control of large bodies of land is the acquirement of title by stock owners to the valleys, water-courses, and other especially valuable lands within the inclosures by means of fraudulent or fictitious entries caused to be made under the pre-emption, homestead, and desert-land laws. Investigations of such entries are in progress in several districts.

In April last a circular was issued by your direction giving notice as follows:

> The fencing of large bodies of public land beyond that allowed by law is illegal, and against the right of others who desire to settle or graze their cattle on the inclosed tracts.
>
> Graziers will not be allowed, on any pretext whatever, to fence the public lands and thus practically withdraw them from the operation of the settlement laws.
>
> This Department will interpose no objection to the destruction of these fences by persons who desire to make *bona fide* settlement on the inclosed tracts, but are prevented by the fences, or by threats or violence, from doing so.
>
> The Government will take proper proceedings against persons unlawfully inclosing tracts of public land whenever, after this notice, it shall appear that by such inclosures they prevent settlements on such lands by others who are entitled to make settlement under the public land laws of the United States.

This notice has been widely distributed in grazing districts by special agents and officers of this Department, and a number of cases of fencing trespass examined and reported upon by the special agents have been submitted to you for transmittal to the Department of Justice for appropriate action.

A recent decision by the district court of Wyoming Territory affirming the right of the Government to cause the removal of fences from the public lands by proper judicial proceeding, has strengthened the executive department in its efforts to abate the evils complained of. Proceedings in equity, however, involve much time and delay, and I regard it expedient that some remedy at law should also be provided.

I renew the recommendation that an act be passed imposing penalties for the unlawful inclosures of public lands, and preventing by force and intimidation legal settlement and entry.

LAND OFFICE BUILDING.

The necessity for increased accommodations for the Land Office has heretofore been represented to Congress. This necessity is observable to all persons having business with this office, and the importance of providing for it was earnestly urged at the last session of Congress by a special committee of the Senate. The present accommodations are materially less than in previous years, the increase in business not only not being provided for, but former facilities having been impaired and limited by the demands of the Patent Office, which needs all room still occupied by this office.

An important division of this office, in which some twenty clerks are employed and more are required, is now, with a large mass of valuable and important papers and records, quartered in rented rooms at great inconvenience and risk.

The time has arrived when the public interests require the erection of a building for the use of the Land Office and its voluminous records. The records embrace the foundation of title to all the public lands of the United States passed to States, corporations, and individuals by grant, donation, sale, or other disposal. These records are invaluable. To a great extent they could not be duplicated in event of loss or destruction by fire or otherwise. It is of the utmost importance that they be permanently deposited in a perfectly fire-proof building. I earnestly recommend that immediate provision be made for the construction of such building.

INCREASE OF CLERICAL FORCE.

The General Land Office has been deficient in clerical organization from the beginning. There has at no time been a sufficient number of employés to dispose of current work. The increase provided for from time to time has never been proportionate to the increase of business. The volume of work in arrears at the close of each fiscal year has steadily and rapidly grown larger. At the same time, the amount of work accomplished has been greater in proportion than the increase in clerical force. This has resulted from improved system and continued efforts to promote efficiency. But in late years the increase in the amount of work thrown upon the office has been almost overwhelming. The increase in working force and appropriations has been doled out in pittances, and seemingly more to accommodate the Department than to meet the demands of the service. It is no personal advantage to yourself or the Commissioner that work should be disposed of, but it is of public consequence that this official work should be performed.

It is a matter of deep complaint, and is felt to be a public shame, that men upon the frontier, who are developing the country by their enterprise and labor, should suffer delay, and have their rights imperiled

through a false or simulated economy in the necessary disbursements for the conduct of public business.

In 1876 the amount of land disposed of under the public land system was 6,000,000 acres. In 1883 the disposals were 19,000,000 acres, an increase of 200 per cent. The actual amount of new business brought into this office during the last year embraced 226,088 entries, covering 19,430,032.80 acres (exclusive of filings and of areas previously reported), with receipts exclusive of fees for certified copies amounting to $11,705,765.65, against 161,396 entries, 14,309,166.40 acres, and $8,387,927.29 the previous year, being an average increase over 1882 of 39 per cent., and an increase over the year 1881 of 82 per cent.

The increase in clerical force allowed by the last annual appropriation was only 10 per cent., one-half of which was absorbed in the entirely new work of protecting the public lands provided for by recent legislation.

A large volume of work is annually thrown upon the office for which no provision is made in the usual estimates for clerical force. This consists in the preparation of official reports and answers to Congressional and other inquiries. Much of the time of a large number of clerks is occupied during the sessions of Congress, and frequently at other periods, in this manner.

There are now pending before this office 600,000 claims of record in some stage of inception or progress under general laws, exclusive of railroad grants, swamp and mineral lands, and private land claims. The pending agricultural claims alone involve an adjudication of title to 90,000,000 acres. If but one-half of these claims should be perfected into title it would take the present force employed upon this work three years to complete the adjustments, leaving the whole volume of business that might come up within that period unprovided for.

I have asked for one hundred additional clerks for the service of the next fiscal year. This estimate was made before the completed returns and accounts had disclosed the extent of the increase in business during the year, and without fully considering the inadequacy of such estimate. It is my most conservative opinion that two hundred additional clerks of the higher grades are immediately needed, and could be employed with economy to the Government for a number of years to come. Provision for a grade of examiners of land titles, corresponding to the grade of principal examiners in the Pension Office, would be extremely desirable.

SALARIES.

It cannot be suggested that the General Land Office is less important to the public interests than other bureaus of the Executive Departments, nor that the duties devolving upon the Commissioner are less comprehensive or arduous than those pertaining to any other office of similar grade. And yet the salary attached to this office is smaller than that allowed in several other positions involving a no greater magnitude of interest nor more exacting duties. The character and responsibilities of this office appear to me to justify the moderate recommendation that the salary of the Commissioner be fixed at $5,000.

ASSISTANT COMMISSIONER.

I renew the recommendation that an Assistant Commissioner be provided for. More than half the time of the Commissioner is taken up with official interviews upon the great variety of topics incident to the

administration of the office. Two or three hours daily are consumed in the mechanical work of affixing his signature to letters and documents, numbering about 500 daily, leaving him little or no time for the consideration of important matters to which his personal attention is supposed to be given. An assistant who should be authorized to sign such letters and papers, and perform such other service as the Commissioner might direct, would relieve the latter of much routine work, and enable him to better attend to the higher duties of his office.

CHIEF CLERK, LAW CLERK, ETC.

My estimates include a recommendation for a moderate increase in the salaries of the principal officers and clerks subordinate to the Commissioner. A greater increase than I have recommended would be expedient in the interests of good administration, and but a just reward for competent and faithful service.

The compensation provided for clerks and employés of the lower grades is reasonable; but the duties which clerks of higher grades are required to perform call for a degree of intelligence and ability that cannot be retained in the service, when secured, at the inadequate compensation provided. The Government needs the best service it can obtain, and is able to pay for it, but the Land Office is often unable to retain valuable clerks. The salaries paid in the Land Office are less than in other Bureaus and Departments not requiring as great capacity or ability. A transfer has recently been made from an $1,800 position in this office, requiring professional skill of a high order, to a similar but not more onerous position in another Department where the pay allowed is $2,500. A skilled assistant, whose services were needed, but who could here be paid but $1,600, received $2,000 by a similar transfer.

The chief clerk of this Bureau performs services of a character that should be paid by an increase of salary to $2,500. He must be competent to act as Commissioner, and his duties involve great tact and discretion as well as constant and arduous labor.

The law officer must be competent to submit opinions to the Commissioner upon the most complex questions arising in the administration of the land laws. He is constantly called upon to perform services requiring a high order of legal ability, and that familiarity with land law and practice which only careful training and long experience can give. I have asked an increase to $2,500 for the law clerk, and to $2,250 for an assistant, whose duties are similar.

I have also asked an increase to $2,000 for two examiners of office decisions, who are now taken from fourth-class clerks, and whose duties are of exceptional character and responsibility.

The early organization of the General Land Office included three principal clerks to be appointed by the President. There were then but three principal divisions. Now there are ten, exclusive of the recorder, chief clerk, and law clerk. There is no reason why a distinction should exist in the method of appointment or official designation of any of the ten clerks who are chiefs of the ten divisions. I renew my recommendation that the distinction adverted to be abrogated.

I have recommended an increase in the salaries of chiefs of divisions to $2,000. They supervise all the work done in their respective divisions as well as the standing and conduct of the clerks, and the amount asked is less than that allowed in other branches of the service for no higher or more responsible duties.

The foregoing recommendations for increase of official compensation

are believed to be moderate and within the legitimate requirements of a proper administration of the public land system.

A proper protection of the public lands and provision for a speedy adjustment of the claims of settlers appear to me to be among the most important matters that can engage the attention of Congress at the approaching session, and I respectfully submit the several suggestions and recommendations herein made for due consideration.

Very respectfully,

N. C. McFARLAND,
Commissioner.

Hon. H. M. TELLER,
Secretary of the Interior.

REPORT OF THE COMMISSIONER OF PENSIONS.

DEPARTMENT OF THE INTERIOR,
PENSION OFFICE,
Washington, D. C., October 1, 1883.

SIR: I have the honor to submit herewith the annual statement showing the operations of this Bureau for the fiscal year ended June 30, 1883.

There were at the close of the year, June 30, 1883, 303,658 pensioners, classified as follows: 198,643 Army invalids; 74,373 Army widows, minor children, and dependent relatives; 2,468 Navy invalids; 1,907 Navy widows, minor children, and dependent relatives; 4,831 survivors of the war of 1812, and 21,336 widows of those who served in that war.

There were added to the roll during the year the names of 38,162 new pensioners, and the names of 796 whose pensions had been previously dropped were restored to the roll, making an aggregate of 38,958 pensions added during the year, being an excess over the number added to the roll the preceding year of 10,645. During the year the names of 20,997 pensioners were dropped from the roll for various causes, leaving a net increase to the number on the roll of 17,961 pensioners.

It will be observed that the number dropped from the roll is nearly 50 per cent. in excess of that for the previous year, and a word or two of explanation upon that point will prevent misunderstanding. It has been customary for several years to retain upon the roll the names of any pensioners who may have died and final payment not been made, until a settlement was made of the amount due. The amount due in such cases would average perhaps less than a quarter's pension. In many instances no person survived the pensioner who would, under the law, be entitled to receive the pension due; and again, the amount might be so small that it would remain unclaimed, as the expense necessary to prove title would equal if not exceed the small amount of pension due. There is also another class wherein the statutes provide that the failure to claim pension for three years shall be deemed presumptive evidence of death, recovery from disability, or remarriage, as may be applicable to the several classes. The considerable number who are annually dropped from the roll under the statute (section 4719 Revised Statutes) represent a one and two years period for which these pensioners do not receive their pensions.

From these circumstances it will be seen that the number of pensioners reported as on the roll at the close of each year is in excess of the

actual number, and necessarily affects the average of each pensioner, as well as the annual value of the roll. Taking the preceding year as an illustration, the annual value of pensions as reported was a little more than $1,000,000 too great. To obviate this in the future, I instructed the several pension agents in January last to drop from their rolls the names of such pensioners where they were in possession of satisfactory information of death, without regard to the fact that there was a balance of pension due and unpaid; also, that the right of any person entitled to receive the accrued pension should not be prejudiced because such name had been dropped from the roll.

The average annual value of each pension at the close of the year is $106.18, and the aggregate annual value of all pensions is $32,245,192.43, an increase over the value for the previous year of $2,904,090.81.

The amount paid for pensions during the year is $60,064,009.23, exceeding, as will be observed, the annual value of pensions several millions of dollars. The great bulk of this excess is for the arrears of pension covering the period prior to the allowance of the claim.

Annexed to Table 1 will be found a statement showing that $29,906,753.94 was paid to 34,990 newly allowed pensions upon first payment, while of the same class there remained in the hands of the several pension agents 5,963 cases in which there was due as first payment and unpaid the sum of $4,271,459.29.

Included in these numbers are 4,993 Army invalids and widows, whose claims were filed in this office subsequent to July 1, 1880, and who were not entitled to arrears of pension. The allowance of this considerable number of claims filed subsequent to the statutes of limitation granting arrears very materially affects the average first payments when the whole number allowed is considered. It is a subject of interest that so many of these lately filed claims have been allowed, when there are 148,813 pending claims with title to arrears, presumably entitled to precedence, having been filed so long previously. And with great care I have had an analysis of the files made which involve the examination of every pending case (244,505) in order that the causes might be known. The details of this analysis are set forth in Table 12, while a more general discussion of the same in connection with matter relevant to it is entered into later on in this report.

Table 2 shows the various causes for which the names of the 20,997 pensioners were dropped from the roll, classifying what is termed the widows' roll, showing the number of widows with and those without children, the number of minor children who were pensioned in their own right and the number of dependent mothers and fathers. It also shows the whole number of pensioners on the roll with their subdivision of the widows' class.

Table 3 shows the amount of appropriations on account of pensions and disbursements. The appropriation for salary, fees, &c., to pension agents was exhausted, and there is a balance due the agents. In connection with this table is shown a statement of disbursements during the year of $79,808.70 for arrears of pensions in such cases where the pension had been originally granted prior to January 25, 1879, and the commencement of their pension was at a date subsequent to discharge or death. The act of the date mentioned provided for arrears for this class and the disbursements have been kept separate from those of regular pensions.

In Table 4 will be shown the number of pensioners on the roll of each agency by the several classes, together with the amount paid on account of pensions by each agent, and compares these items in their aggregate

with those of the previous years. In the column of salary and expenses of pension agents is included, as disbursed, such balances as were due the agents at the end of the year, that there should not appear an inequality upon comparison by agencies in such disbursements.

Table 5 shows the number of original claims filed year by year since 1861, the number of pensioners on the roll at the close of each year since 1861, and the amounts paid for pensions, including cost of disbursements for same periods.

In this statement it is shown that 496,721 claims have been filed for disability incurred while in the service, and 312,029 by widows and others on account of death chargeable to the service. Of the former class 245,210 and the latter 206,716 have been allowed. Excepting the small number whose claims were on account of wars prior to 1861 and those of the Regular Army since the war of the rebellion, the balance are on account of the service of the war of 1861–'65. Including the pensioners provided by the acts of February 14, 1871, and March 9, 1878, to surviving soldiers of the war of 1812, and the widows of those who served, &c., the whole number of claims filed since 1861 is 886,137, and 510,938 have been allowed. During the same period there has been paid for pensions, with cost of disbursements, the sum of $621,073,297.60.

Table 6 shows the number of each class of claims on the files at the commencement of the year, the number filed during the year, the number admitted and the number rejected for the same period, and the number of each class which were pending and on the rejected files at the close of the year.

Table 7 showing the operations of the special examination service of the office, and a comparison with the operations of the previous year, which was then regarded as exceedingly gratifying, will show a great increase in the efficiency of this service with corresponding results.

Table 8 gives the location and geographical limits of each pension agency, the name of each agent, and the balance of funds remaining in the hands of each agent at the close of the year.

Table 9 shows the different rates of pension paid to Army and Navy invalids, together with the number of pensioners of these classes to each rate.

Table 10 shows amounts paid for pensions on account of service during the war of 1812, in each year since Congress provided pensions for this class (act of February 14, 1871).

Table 11 shows the number of late war invalid claims allowed each year since 1861, classified and arranged so that in each year's allowance it is shown in what year the claims were filed for all the preceding years as well as the one in which such allowance was made. In it is also shown the percentage of claims out of the number filed which have been allowed each year. By subdividing this twenty-three years' period there will be shown an interesting statement of the percentage of claims allowed out of the number filed. That is, of the whole number of Army invalid claims filed from 1861 to 1865, both inclusive, representing the first period, three years (while the war of the rebellion was yet in progress), 76.7 per cent. have been allowed; for the next five years, to 1870, 88.8 per cent. have been allowed; for the next five years, to 1875, 64.8 per cent. have been allowed; the next five years, to 1880, which terminates the arrears period, 39.4 per cent. have been allowed, and for the next period of three years, to 1883 (to date) 4.6 per cent. have been allowed: or of all claims of this class of Army invalids filed within the arrears period (prior to July, 1880), 57.4 per cent. have been allowed, and there

are still pending 111,730 Army invalid claims at the close of the present fiscal year.)

This statement will enable the readers of this report, who are interested in the subject, to draw conclusions additional to those which may not be set forth in full detail.

An analysis of Table 11, with the view of showing the fluctuating periods in which claims have been allowed after filing, is herewith submitted. This compares, by percentage, the work of this with former years, from 1872 to 1883, inclusive, showing the per cent. of claims allowed during the same year in which they were filed, and for the first, second, third, fourth, fifth, sixth, and seventh year preceding, also for the full time (in aggregate) prior to the seventh year period back to 1861.

Years in which allowed.	Filed the year in which allowed.	Filed the first year before allowed.	Filed the second year before allowed.	Filed the third year before allowed.	Filed the fourth year before allowed.	Filed the fifth year before allowed.	Filed the sixth year before allowed.	Filed the seventh year before allowed.	Filed the eighth and previous years before allowed and since 1861.
	Pr. ct.	*Pr. ct.*	*Pr. ct.*	*Pr. ct.*	*Pr. ct.*	*Pr. ct.*	*Pr. ct.*	*Pr. ct.*	*Pr. ct.*
1883....	1.8	4.6	4.2	55.5	12.9	3.1	3.1	2.4	12.0 in the fourteen years previous to 1875.
1882....	.5	.6	43.4	21.5	6.1	4.6	4.0	2.4	16.4 in the thirteen years previous to 1874.
1881....	.7	11.2	37.1	11.4	7.5	5.8	3.6	2.3	20.1 in the twelve years previous to 1873.
1880....	2.7	27.6	18.5	10.9	7.7	4.6	3.3	2.6	21.6 in the eleven years previous to 1874.
1879....	10.9	36.3	20.6	8.5	3.8	2.6	1.7	2.1	13.0 in the ten years previous to 1871.
1878....	12.4	30.3	25.2	5.7	3.3	3.4	2.9	1.7	14.7 in the nine years previous to 1870.
1877....	10.9	36.5	16.4	8.3	6.4	3.8	2.0	2.7	12.5 in the eight years previous to 1869.
1876....	12.0	43.1	11.6	6.5	5.3	4.1	3.2	2.3	11.5 in the seven years previous to 1868.
1875....	17.3	34.6	12.4	6.8	6.4	5.0	2.6	1.6	12.9 in the six years previous to 1867.
1874....	14.3	31.9	18.4	7.9	7.9	3.2	3.1	2.6	10.2 in the five years previous to 1866.
1873....	21.2	26.1	16.8	12.7	4.7	3.1	5.6	4.0	5.2 in the four years previous to 1865.
1872....	7.2	32.3	27.2	8.1	3.6	5.7	7.3	3.2	5.0 in the three years previous to 1864.

It will be remembered that the great bulk of claims entitled to arrears were filed in the office in 1880 and previous thereto, and while there has been a large number filed since 1880, it has been the uniform rule of the office to give precedence in their consideration to the earlier filed claims, especially those involving arrears.

These it was thought would consume the time of the office for several years. Referring to the table just discussed, it will be observed that in 1881 only 0.7 per cent. of those allowed were filed the same year of allowance, while 11.2 per cent. of those allowed were filed the year previous to allowance, and these were filed within the arrears period. In 1882 only 0.5 per cent. of those allowed were filed the same year of allowance, and 0.6 per cent. of those filed the year previous, and 43.4 per cent. of those the second year before allowance. This latter represents those entitled to arrears, while the two former were filed subsequent to the arrears act. This illustrates the care exercised that precedence of action should be given the earlier filed claims, where the calls of the office had been met by the claimant with the necessary evidence, and, except for special and urgent reasons, none of the cases filed subsequent to July 1, 1880, were taken up for action. In the present year, 1883, quite an increase in the allowance of the latter filed cases will be observed—*e. g.*, 1.8 per cent. of those allowed in 1883 were filed the same year, and 4.6 per cent. of those allowed were filed the first year previous; 4.2 per cent. of those allowed were filed the second year previous; 55.5 per cent. of those allowed were filed the third year previous; the latter number being arrears cases, while the former were filed subsequent to the arrears act.

Having called attention in the early part of this report to the fact that so many claims have been allowed which were filed subsequent to the arrears period, while so large a number filed at an earlier period remained unsettled, and presumably entitled to precedence, I wish here to invite your attention to the causes which have produced this result.

It will be remembered that during the year 1881–'82, more or less confusion existed in this office and in the offices of the Surgeon-General and Adjutant-General on account of the many thousands of arrears cases filed inside of eighteen months in 1879 and 1880, besides the revival of title in several thousands which had been on file for years.

While the number of settlements were in excess of former years, yet it was proportionately small to the then large number pending. Acting upon my suggestions Congress provided a liberal increase of the clerical force of the office, and otherwise enabled me to promote the efficiency of the Bureau, though from various unavoidable causes I was not enabled to utilize these advantages as early as I had hoped, so that it was late in the fall of 1882 before the increased clerical force were fairly at work. So large an addition to the force of the office necessarily consumed the time and attention of the more experienced examiners and clerks, withdrawing for a time their experience from the routine work of the office. Yet, so well was the work of instruction to the new clerks pushed forward that their efficiency was soon of good service. Not only were all of the claims which involved arrears examined and proper calls made for evidence, but it was done so rapidly that like examination and calls for the testimony of one character or another were made in upwards of 100,000 claims filed *since* the arrears act. It was reasonable to expect impatience on the part of those entitled to arrears at what to them seemed unnecessary delay on the part of the Government, and that they would come forward rapidly with the testimony to complete their claim whenever the Pension Office should indicate what was needed. In a very considerable degree this expectation has not been realized, but, on the contrary, those entitled to arrears are shown to be in default in meeting the office for a prompt settlement of their claims by furnishing the testimony required, while those whose claims were filed during the three years subsequent to the arrears act have not been very generally afforded even an opportunity to prove their claims until the past year, yet they have so responded that but 70 per cent. of the claimants of this class are in default upon calls made alone upon them for evidence, while those of the other class entitled to arrears are in default for the same cause in 83 per cent. of the number pending. My expectations having been more than met by the efficiency of the clerical force and the energy of my subordinates in pushing forward the settlement of the claims, and by the work of the office having been brought practically up to date, I desired to show to a certainty, to what extent the office and the claimants were behind, respectively. With this view I caused an examination to be made of every case which was uncompleted July 15, 1883.

The report of the work showing first the delay chargeable to the claimant and others than the Pension Office, to wit: Default of claimant for evidence which he has been required to furnish; cases awaiting a report from the Adjutant-General, U. S. A.; cases awaiting a report from the Surgeon-General U. S. A.; and cases in which correspondence had been had with witnesses and awaiting a reply thereto.

Then such cases wherein the delay might be chargeable to the Pension Office for various causes, to wit: Cases in which evidence had been filed and awaited examination; cases awaiting a special examination at the

home of the claimant or his witnesses; cases awaiting action of the board of review, and cases awaiting action of the medical division of the office. This table shows those who are delayed from these various causes first, of those who are, and secondly of those who are not, entitled to arrears separately, the whole classified and arranged so that information under these general heads is shown for each State service, the Territories consolidated, the Regular Army, the Navy, old wars prior to 1861, and the claims for service pension on account of the war of 1812.

I append herewith a table which summarizes the result in general items, and have given the details in Table 12 with more particularity.

Class of claims.	Delay of claimant.	Delay in Adjutant-General's Office.	Delay in Surgeon-General's Office.	Delay of affiants to answer office letters.	Delay in Pension Office.	Total.
Original invalid, with arrears	93,515	1,604	1,003	2,804	14,071	113,087
Original invalid, without arrears	60,207	5,865	1,525	798	2,890	71,284
Original widow, &c., with arrears	31,401	209	168	182	3,756	35,726
Original widow, &c., without arrears	19,166	2,258	116	62	2,805	24,408
Total	204,290	9,935	2,902	3,846	23,523	244,505

The following is a classification of the 184,371 pending original invalid claims, indicated above, by disabilities for which pension is claimed:

	Wound.	Disease.	Injury.	Hernia.	Combined disabilities.	Total.
With arrears	9,124	70,561	15,215	4,816	13,371	113,087
Without arrears	5,607	47,508	7,492	2,035	8,642	71,284
Total	14,731	118,069	22,707	6,851	22,013	184,371

It is seen above that 23,523 cases are reported as chargeable to the delay in the Pension Office. Of these, 14,391 are reported as in the hands of special examiners for investigation at the home of the claimant or the cross-examination of material witnessses, and 971 as before the board of review for final action, being presumably complete; thus leaving course of examination in the Pension Office, and, properly speaking, there delayed, 8,161 claims only, and these consist largely of those recently filed. This showing demonstrates that the Pension Office is practically up with current work, and that further delay in the settlement of pension claims will be properly chargeable to the laches of the claimants in producing the necessary evidence called for, but not yet filed, or to the inability to produce said evidence, and not to the Pension Office.

Table 13 shows by each State and Territory the number of claims made for pension on account of the late war, of invalids, widows, children, mothers, and fathers; the numbers which have been admitted and are now pending. Out of the number admitted and pending it is shown in each those who are and those who are not entitled to arrears.

RECOMMENDATIONS AND SUGGESTIONS.

In my last annual report I took occasion to call attention to several defects in existing law bearing upon the administration of the business

of this Bureau and the dispensing of the pensions of the Government to its disabled defenders and those who depend upon them, suggesting such amendments as occurred to me would render them more efficient in accomplishing their object, pointing out wherein they were unequal or unjust in their present application, and proposing such new enactments as seemed to be necessary and proper. These suggestions, with one or two exceptions, met with your approval; most of them were introduced in one house or the other as bills, but except in case of one or two none became laws.

Believing, however, that it is the duty of officers charged with the administration of laws which take money from the Treasury to continue to call attention in an official way to defects or omissions in these laws where they are found to exist, I shall place upon record again, and in the same language used last year for the most part, some recommendations for new legislation, and some suggestions as amendments to old laws relating to the work of this Bureau, and I ask your consideration of them and your approval of such as you deem expedient.

OLD WAR CLAIMS.

I would suggest that the acts of March 16, 1802, section 14 and section 7 of the act of March 3, 1815, and other supplementary acts, be re-enacted by way of amendment to section 1639 of the Revised Statutes, for the reason that considerable difficulty has been experienced in the disposal of invalid claims based upon disabilities originating prior to March 4, 1861, owing to the fact that the old military establishment acts above referred to were not re-enacted in the Revised Statutes, as it seems to me they should have been. This recommendation will serve to call the attention of Congress to certain acts omitted in the revision of the laws, and when they shall take notice of the same I will, if desired, appear before the committee and point out more particularly these and other laws which should be re-enacted.

I recommend the repeal of section 1636, inasmuch as it is practically covered by the provisions of section 4732 of the Revised Statutes, and is only calculated to mislead and confuse.

BOUNTY-LAND LAWS.

In regard to the bounty-land laws, I think that they should be generally remodeled and simplified. The mistakes made in the codification of the laws as found in the Revised Statutes should be corrected, and changes should be made to equalize the benefits to all the classes of persons to whom title is already given under the law. Especially should the following sections be amended, viz:

1. Sections 2418 and 2419, so as to separate the provision relating to the Mexican war (under act of February 11, 1847, and its amendment of May 27, 1848) from the provisions of the equalizing act of September 28, 1850. As it stands now the language of the section, together with the repealing provisions of the Revised Statutes, seem to cut off certain classes who were provided for by the old law, February 11, 1847; but the old law was in the nature of a contract, and is not therefore proper in any way to curtail its provisions. The provisions of section 2418 (in so far as it re-enacts the provisions of the equalizing act of September 28, 1850) should be extended so as to give the full benefit of sections 2425 to 2427, inclusive, to the very small class of persons now provided for under section 2418, who do not already come under section

2425, *et seq.* Almost the only change it would make would be to give a warrant for 160 acres to a few fathers, mothers, brothers, and sisters (on a service of fourteen days, or battle service) who are now entitled to warrants of varying amounts, from forty acres to one hundred and sixty (according as the service of soldier was one month, six months, or twelve months).

2. Section 2429 should be so modified as to give the succession to the minors upon the remarriage as well as upon the death of the widow, in case there are minors; provided, that where there are no minor children the widow's title may return to her on her again becoming a widow.

3. Sections 2439 and 2440 should be so amended as to make it the duty of the General Land Office to take all the testimony upon which duplicate land warrants shall be issued, the Pension Office to issue such duplicates upon the certificates of the Commissioner of the General Land Office and the direction of the Secretary of the Interior thereon, and deliver the same to the said Commissioner of the General Land Office, as a voucher to be placed upon his files, or for delivery to the person entitled to its possession. This is a question which you have had under consideration; therefore I do not deem it necessary to set forth all the reasons why I think that such a change should be made. I will, however, state one important reason: that is, that all questions relating to the assignments of warrants belong to the General Land Office to settle, has been authoritatively declared, and such questions are the principal ones to be settled in the issuing of almost every duplicate ever asked for, in order to determine into whose possession to deliver the duplicate when issued.

4. Sections 2444 and 2445 should be amended so as to be in harmony with the last paragraph of section 2418, and with section 2428, Revised Statutes, so that where there are any other heirs of the soldier whose succession is provided for in section 2418, or 2428, the provisions of sections 2444 and 2445 shall not apply, but the title shall succeed in the order designated in sections 2418 and 2428. The practice of the office has been generally in accordance with the suggestions made herein, but the letter of the law leaves room for doubt, a fact which has been taken advantage of by those prosecuting claims, to the considerable annoyance of the office.

LATE WAR PENSIONS.

I recommend that section 4693 of the Revised Statutes, which pertains to irregular enlistments (non-enlisted persons), and which grants pensions to certain classes, be amended so as to extend the benefits conferred by it to wounds and injuries received or disease contracted by non-enlisted men serving as scouts, by virtue of the authority of any general officer, and to certain classes of employés of the Quartermaster General's Department, who were subjected to unusual hardships and dangers; and I would also recommend the repeal of the last clause of said third paragraph, as it imposes, in my opinion, an unjust limitation upon a frequently worthy class of applicants. I think the whole paragraph should be remodeled so as to define more clearly the classes to be benefited. Paragraph 2 of said section should, I think, be amended so as to be more specific in its definition of its beneficiaries, and should define more clearly what is meant by the term "war vessel."

GENERAL-SERVICE ENLISTMENTS.

Some difficulty in the application of the provisions of section 4694 of the Revised Statutes has been encountered, owing to the indefiniteness

and the varied constructions of the term "military post," &c. I would suggest that such an amendment to this section be made as will clearly and specifically define the meaning of the term "military post," and also fix the practice as regards the pensioning of men who were enlisted in the general service, and detailed to do duty at Washington City and other posts.

RANK AND GRADES OF PENSION.

Section 4695 of the Revised Statutes, which fixed the various grades of pension, might be amended so as to provide a more equitable distribution, and to comport with the actual disabilities of pensioners. In fact, the time has come, in my opinion, when Congress should give a thoughtful consideration to the entire regrading of pensions, making disability, rather than rank, the measure of the pension. There can exist no good reason in pensioning a volunteer force when for the same disability a lieutenant-colonel may receive $30 per month, and a private soldier but $8; both having been drawn from and returned to the same walks of civil life. This doctrine has already obtained in the recent legislation granting high grades of pension for the more serious disabilities, such as total helplessness—loss of leg or arm, hand or foot, and their equivalents—but the distinction of rank still exists as to the lower grades of disabilities, and are absurd and unjust. This subject is one, however, which requires a careful and searching investigation; and I simply make this suggestion in the hope that Congress may take such steps as will eventually bring about an entire change; one which, in my opinion, if carefully done, will prove advantageous alike to the pensioner and the Government.

In my judgment this can best be effected along with some other reform in pension legislation, by the appointment of a mixed commission, to consist of say two members of the Senate, two members of the House, the Commissioner of Pensions, the medical referee of the Pension Office, one surgeon, and one person learned in the law not in the employ or service of the Government. They should codify and re-arrange the pension laws, and prepare a plan for re-rating and grading pensions on the basis of disability only, and provide a remedy for the defects in existing law as to agents and attorneys, and, in short, investigate and intelligently deliberate, with full time and power, and digest a thorough reform of law and practice that shall commend itself and take the place of the present anomalous and illogical condition of existing laws. In this connection I would respectfully call attention to the statistics exhibited by Table 9. The astonishing fact is there shown that there are 120 different grades of pensions now being paid to pensioners. In the brief space I can allot to it in this report I can hardly refer to the causes which brought this about, but would state that in my opinion the almost constantly varying scale provided by new legislation, some of which reaches but a small and others a large class, makes the rule of grading a constantly shifting one, and makes uniformity almost impossible.

So long as the amount of pension is fixed by rank, I respectfully recommend the amendment of section 4696 of the Revised Statutes by striking out the words "that a vacancy existed in the rank thereby conferred." The effect of this amendment will be to give an officer the benefit of his actual rank, notwithstanding the fact that there was no technical vacancy at the time. It is within the experience of every officer that, had the actual minimum number of men required by the Army Regulations for each company been strictly regarded in commissioning or retaining volunteer officers, many commands would have

been without properly commissioned officers a good part of their service. It is but fair, so long as the grade of pension is controlled by the rank held, that the pensioner should have the benefit of his actual service in the grade for which he held commission.

INCREASE AND ERRORS IN RATING.

I wish to renew my recommendation regarding the amendment of section 4698½ which, in its administration, I find very often works great injustice to worthy pensioners. In the consideration of so vast a number of claims as are presented to this office, mistakes and errors in rating are almost inevitable, and this section has been so construed as to preclude the possibility of a correction of many of them. I therefore recommend that section 4698½ be repealed and an act passed in lieu thereof containing substantially the following provisions: If any invalid pensioner shall feel that his pension is not commensurate with the degree of his disability, either because it has been improperly rated by the Commissioner of Pensions, or because the disability for which he was pensioned has increased, he may appeal to the said Commissioner for a rerating or an increase, as the case may be, at any time within one year immediately following the original adjudication and said application shall be considered and determined in the same manner as was his original application, so far as such proceeding shall be applicable to the case. And the Commissioner of Pensions shall cause any invalid pensioner to be examined by a board of surgeons as often as he shall deem it for the interest of the Government or of the pensioner; and if, upon such examination, it shall appear that the pension enjoyed by the pensioner is not according to the degree of disability, and that such disability in its nature has been permanent in the same degree as then found, the same shall be rerated according to right and justice; provided, that in case where increase is granted for the reason that the disability has increased since the pension was last rated by the Commissioner of Pensions, such increase shall commence at the date of the filing the application therefor; and provided further, that if the disability has not changed in degree since discharge, such increase or rating shall commence on the date at which the original pension began; provided further, that all applications for increase on the ground that the pension has been improperly rated, made and filed more than one year after such alleged improper rating was fixed, shall be treated and settled as in the case of increase claims, on the ground of increased disability, and commence on the date of filing the application therefor; and the Commissioner of Pensions is authorized to correct at any time, on his own motion and without application, a manifest error committed at any time in the rating of any pension.

DEPENDENT RELATIVES.

In the application of section 4707 to the cases of dependents now under consideration in the Pension Office, it is noticed that great injustice seems often to be done to a worthy class of pensioners by the narrow construction of it, made necessary by its terms. As it now stands, there is no discretion left with the Commissioner, but, on the contrary, actual dependence must be proven, in the manner specified in the statute, to have existed at and before the soldier's death. I shall content myself with one illustration:

A widowed mother, in the enjoyment of a competence, and otherwise

in ordinary circumstances, gives her only son to the defense of her country. She has fitted him in every way to become her prop and dependence in life, when she shall have advanced to a greater age, or to a degree of helplessness which would require his maintenance and support. The son is killed in battle; he did not in fact contribute to the support of his mother at or before the date of his death, but in reality has been supported by her up to the time of his enlistment. Increasing years and adversity overtake the mother and she becomes dependent on the charity of friends. Had the son lived this would not have been the case; and yet we are obliged to deny the mother a pension because it cannot be shown that at the date of the soldier's death she was dependent upon him for support, in whole or in part. The mere statement of such a case, it seems to me, carries with it the argument to convince all that there is a necessity for an amendment to this section.

The exact terms in which this section controls the character of evidence required, practically excludes from its benefits slave mothers. I therefore recommend that it be amended so as to provide that when the soldier died while the mother was yet in a condition of slavery, she shall not be denied a pension because of her inability to show that her said son contributed to her support, or that he recognized his obligations to do so.

COMMENCEMENT OF OLD WAR PENSIONS.

In order to carry out the full and evident intention of Congress, as exhibited by the whole course of pension legislation, and especially by the more recent acts, and to place old war claims more nearly upon the same footing as those of the late war, I would suggest that the limitation contained in section 4718 be removed, so that cases debarred by the three-year limitation shall have their date of commencement at the time of filing the application, rather than at that of the filing of the last piece of evidence. This amendment will not affect a large class of cases, and the present law is so manifestly unjust that I do not hesitate to suggest the change.

THE EVIDENCE OF DISABILITY IN RESTORATION CASES.

In order that the last clause of section 4719 may not be almost totally inoperative, I would suggest that after the word "medical," in tenth line, and before the word "evidence," there be inserted, by way of amendment, the words "or other satisfactory." This slight amendment will enable the office to do justice in many cases where it must now be denied.

MISSOURI STATE MILITIA.

I can see no good reason for the long-continued limitation imposed by the last clause of section 4722. I therefore recommend that applicants for pension under this section be placed upon the same footing as other soldiers.

OVERPAYMENTS TO PENSIONERS.

It frequently happens that erroneous payment or overpayment is made to a pensioner, whereby he receives much more than the amount to which he is entitled. It has been the practice to withhold the pen-

sion until it shall have amounted to a sufficient sum to cover the overpayment. I ask that this practice be given the sanction of the law, as thereby no hardship can come to the pensioner, nor his right to proper pension thereby be reduced a penny, but the Government is by this means reimbursed and protected against loss. I would recommend that this provision be attached to section 4766 as a proviso or amendment, and that the said moneys be covered into the Treasury when sufficient has been withheld to reimburse the overpayment, without the voucher or receipt of the pensioner, his receipt for the overpayment being a sufficient one to protect the pension agent upon his bond.

CLAIM AGENTS AND THEIR RELATION TO THE OFFICE.

I can perhaps add nothing new to what I have already said in my reports of 1881 and 1882 upon this subject, further than to say that the evils complained of have greatly increased and will continue, and that the present situation calls for immediate action on the part of Congress. The questions affecting the relations of claimants and claim agents, and their status before this office as practitioners, are, all things considered, the most perplexing and annoying which arise in the administration of the Pension Bureau.

The construction which has heretofore been placed upon the act of June 20, 1878, by which agents claim and exact generally their fee in advance, has, I think, operated to practically exclude from the practice many educated, responsible, and useful attorneys, and has attracted to it many ignorant, unscrupulous, and useless persons, whose only object seems to be, first, to procure applications from soldiers, regardless of merit, to be filed through them, and then, while acting simply as transmitters of the papers, assiduously dun the claimant until the ten-dollar fee is secured, and thereafter practically abandon the case, like a "squeezed orange," preferring rather to seek new victims than expend time in serving old ones. Rules must be framed and practice adhered to which will protect as far as possible the unwary claimant in his dealings with this class of men. As it is impossible to discriminate, respectable, industrious, and useful agents, who are honestly endeavoring to forward the interests of their principals, justly complain of the severity and rigor with which we are compelled to enforce our rules of practice.

I quote from my report of 1881, as follows:

In my opinion the actual results of the enactment of June 20, 1878, have been deleterious to the interests of the claimants and agents alike; to claimants, in that the abolishment of the contingency of success and the removal of the security to the agents has stimulated many irresponsible persons, who could be of no possible service to the claimants, to invite a general application of soldiers for pension, regardless of disabilities incurred, by which, after filing the claim, they may obtain in advance the legal fee of $10, and thenceforth abandon the claim, thus encumbering the files of the office, and hindering and delaying meritorious claimants; to the agents, by degrading the profession and bringing into disrepute an otherwise legitimate employment. Agents in good standing and well informed in pension law and practice, when their fee depended upon the successful prosecution of the claim, would, and I believe did, examine and scrutinize the merits before risking years of labor, and refuse to file cases without merit. Unpleasant friction between the principal and agent was avoided by the contingent fee and security of payment, because of the identity of interests.

I recommend that Congress re-enact the laws in force prior to June 20, 1878, upon this subject, and make such provision as will protect the Department and claimant alike from ignorant and useless agents, and protect and assist well-informed and useful ones.

And from the report of 1882 as follows:

In my last annual report I dwelt upon the subject of claim-agents and attorneys and their fees. Experience fully justifies me in my opinion in all that was said in

that report touching this subject, and I wish to refer to it and make it a part of this. Much time and labor are spent in the prosecution of claims by attorneys and agents, who, after years of labor, find themselves limited to a fee of ten dollars, and in self-interest resort to subterfuges and devious methods to obtain a greater fee from the claimant. I think this office should be relieved from the vast amount of annoyance caused by the petty prosecution of men, perhaps not otherwise dishonest, who find the opportunity offered by the receipt of large sums of arrears of pension by their principals to collect from them a greater fee than is allowed by the act of June 20, 1878, too great a temptation to be borne. Wherever such cases come to my knowledge, it is my duty, and I have endeavored to discharge it, by prosecuting the offender and recommending that he be disbarred from practice. The offense is often so trifling that it is exceedingly annoying to be compelled to set so much force upon such small and seemingly unimportant outside matters. In my opinion, the remedy lies as I have before recommended in the substantial re-enactment of the law in force at the time said act of June 20, 1878, was passed—the salient points to be covered being: First, the establishment of a reasonable fee for the claim-agent or attorney; second, the agreement therefor, to be by written contract, which, as to amount of the fee, shall be subject to the approval and discretion of the Commissioner of Pensions, and the form to be prescribed by him; third, the payment of such fee to be contingent upon the successful prosecution of the claim; fourth, the payment thereof to be made by the pension agent; such guarded provisions to be enacted as will prevent injustice being done claimants whose claims are already on file, where payment of some part of the fee has been made in advance, so that the claimant shall have the full benefit of such payment. I cannot but believe that a well-guarded law of this character will attract to the pension practice an honorable and upright class of regular attorneys, who cannot now afford to undertake the business for the fee, and who are unwilling to be annoyed by such employment under the restrictions as they exist under the present law.

In this connection I would recommend that section 5485, prescribing a penalty for the reception or retention of an illegal fee, be amended as follows: Strike out the words following than is provided," in line 5, in said section; the words " in the Title pertaining to pension," and insert in lieu thereof the words " by law."

REMOVAL OF DISABILITIES OF NAVAL EX-CONFEDERATES.

In my opinion the benefits of the act approved March 3, 1877, which removes the disabilities of those who, having participated in the rebellion, have since its termination enlisted in the Army of the United States and have become disabled, should be extended to those who served in the Navy.

EXTENDING BENEFITS OF ARREARS ACT TO CERTAIN REGULAR ARMY AND NAVY CASES.

There is one class of cases against which the limitation of the acts of January 25, and March 3, 1879, operates most unjustly, and I think the law should be amended so as to cure that defect. I refer to claims of widows and invalid soldiers of the regular Army and Navy, whose rights have accrued since June 30, 1880. They should be allowed a reasonable time, say two to five years, in which to file their applications, and pension should date from the commencement of the accruing of the right, instead of as now, from the date of filing the application.

EXTENDING THE BENEFITS OF THE ACT OF JUNE 16, 1880.

It seems to me that in the provisions of the act of June 16, 1880, an unjust discrimination has been made. I would respectfully recommend that such legislation be had as will admit those who are utterly helpless to the benefits of the provisions of this act, to date from the time when they became utterly helpless; and its benefits should also extend to those who are entitled, by reason of their helplessness, to the rate of $50, at a date later than the passage of the act, or who, for some

other cause, were not actually upon the rolls at that grade on that exact day, but afterwards showed themselves to be entitled from a date anterior thereto.

DESERTION.

The question of desertion in connection with that of title to pension should be definitely settled by law. A pension is in no sense a reward for faithful and meritorious service, but a compensation for loss of physical ability to earn a livelihood. Therefore, desertion subsequent to the incurrence of a disability (and much less a desertion from a prior service to that in which a re-enlistment has been made, and in which a pensionable disability has been incurred) should not carry with it the forfeiture of right to pension. The law should provide that pension, in any case in which a charge of desertion stands unremoved, if title thereto be otherwise shown, shall commence on the date from which the contract for service in which disabled legally terminated, to be ascertained from the date to which last paid for service; provided, however, that the date of discharge from a subsequent service entered into before the legal termination of the service in which disabled, shall be the date from which to commence the pension.

CRIMINAL PROSECUTION.

The efforts made to bring to justice persons attempting fraud either upon the Government by conspiracy to obtain fraudulent pension, or upon the claimants in various ways to induce them to file claims possessing no merit, or by agents or attorneys demanding and receiving either as present or fee more than allowed by law, have been frequently met by the development of defects in the criminal laws, or by such constructions of them as, in a great measure, to defeat or prevent the successful prosecution of the offender. I will particularize a few of the defective sections, which hinder or embarass our criminal prosecutions, and ask that you will recommend their amendment so as to clothe the officers of the law with power to properly punish crimes of this character, if you deem it expedient so to do.

First. Amend section 5485 of the Revised Statutes, by adding after the words "at the discretion of the court," as follows: "That section 1044 shall not apply to the wrongfully withholding pension money, but the offense shall be deemed continuous." And after the words "or instrumentality in prosecuting a claim for pension or bounty land than is provided in the title pertaining to pensions" the words "or any law relating thereto, or receives any gratuity, or any share of, or interest in any such claim for pension or bounty land."

Second. It should be enacted that any person who forcibly assaults, resists, opposes, prevents, impedes, or interferes with any duly authorized special examiner of the Pension Office, or any person assisting him in the execution of his duties, or uses any deadly weapon in resisting him in the execution of his duty, with the intent to commit bodily injury, or delay or prevent him from discharging his duty, shall, upon conviction thereof, be imprisoned to do hard labor for the term of not more than ten nor less than one year.

Third. That any person who falsely represents himself as having been authorized by the Commissioner of Pensions to specially examine or investigate any matter pertaining to the Pension Office, or in such assumed character demands or receives any money or other article of value from the pensioner, or claimant for pension, or any other person,

shall be deemed guilty of a felony, and shall be fined $500, and imprisoned not less than six months, nor more than two years.

Fourth. That if any pension-examining surgeon demands or receives any money or valuable thing from the pensioners, or applicant for pension for his services in the making of any certificate or examination of such pensioner or applicant for pension upon the order of the Commissioner of Pensions, he shall be deemed guilty of a misdemeanor, and upon conviction thereof, shall, for every such offense, be fined in a sum not exceeding $500, or imprisoned at hard labor, not exceeding two years, or both, at the discretion of the court.

FALSE PERSONATION OF REPRESENTATIVES OF THE PENSION BUREAU.

There have been during the past year many instances of false personations of officers or employés of this Bureau, by designing persons, by which unsuspecting soldiers have been deceived and defrauded. This class of frauds are practiced by unprincipled scoundrels who appreciate the fact that there is no law of the United States under which such offenders can be punished; they prey upon claimants in out-of-the-way places. With our large force of special examiners in the field, it is impossible for such impostors to successfully operate long in one place. But until there is a law by which they may be properly punished they will, in spite of all that can be done through the means now at our disposal, continue to impose upon the unwary. On the 21st day of April, 1883, I gave wide publicity to the following instructions given special examiners on this subject:

Numerous complaints have reached this office that unscrupulous persons are traveling throughout the country claiming that they are authorized to represent the Commissioner of Pensions, and upon this and various other pretexts have defrauded pensioners and applicants for pension out of certain sums of money. It is, therefore, my duty to direct that the special examiners of this office shall in every such instance inform the public that no special examiner or other person employed by this office is authorized to receive money, either as a fee or as expenses in any manner; and that each special examiner of the Pension Office is provided with a certificate over the signature of the Commissioner of Pensions, whose signature is duly verified by the honorable Secretary of the Interior, under the seal of his Department, showing that the examiner has been regularly detailed by the Commissioner from the clerical force of the Pension Office, under section 4744 of the Revised Statutes, and is qualified to administer oaths, &c. Therefore, if any person, in the absence of such authority, should represent that he is a special examiner of the Pension Office, or shall demand or obtain money under any pretense whatever, he may be safely set down as a fraud and swindler, and among the worst of his class.

It is my earnest desire that when money has been obtained from pensioners or claimed under such circumstances that prompt and vigorous measures may be taken at once to bring the offenders to justice. This may be done under the laws of the State wherein the offense was committed, under such statutes as have been enacted for the trial and punishment of persons obtaining money or any valuable thing under false pretense. In order that this class of impostors may be published as widely as possible, each case of defrauding claimants or pensioners should be reported by some responsible person, with a full description of the impostor, to the Commissioner of Pensions, who will at once instruct his special examiners to give the proper warning.

A bill for a law passed the Senate, and but for the dead-lock on the last day of the session, would have undoubtedly passed the House, curing the defect in legislation upon this subject. I hope the earliest possible attention will be given this matter by the Forty-eighth Congress.

PLEDGING PENSION CERTIFICATES.

The law recently enacted by Congress, which makes it a misdemeanor both on the part of the pledger and the pledgee to hypothecate or receive as a pledge or security a pension certificate for debt is already bearing

fruit by putting a stop to this pernicious practice in large cities, and lessening the demand for duplicate certificates and permits. I think another year of active and aggressive enforcement of this law will effectually end the evils complained of. In the city of Philadelphia alone over 500 pension certificates have been recovered from pawn-brokers and returned to the owners, and criminal prosecutions are now pending there against violators of the provisions of the new law.

CERTIFICATION OF RECORD.

In a previous paragraph of this report I have called attention to the practice that has grown up in the Department of certifying copies of land warrants by this office upon evidence of title that should be only passed upon by the Land Office, and have made the proper recommendation in relation thereto. We are also frequently called upon to certify copies of papers for use in evidence or for other purposes. This office is, however, I believe the only one where the signature of the Commissioner is not attested by the seal of his office, and this because no seal therefor has ever been authorized or provided by law.

I would therefore respectfully suggest that you recommend that Congress provide by law for a seal for the Pension Office by which certifications over the signature of the Commissioner of Pensions shall be attested.

PENSION AGENTS AND THEIR DISBURSEMENTS.

I desire to call your attention to the fidelity and ability with which the unprecedented disbursements of this Bureau have been made during the past year by the agents for the payment of pensions.

There are eighteen of these offices located, as shown by Table 4, and they have been able to disburse on an average $3,357,331.82 at each agency at an annual expense of $16,008.60. The average disbursements by each last year was $3,016,460.03, at an average annual expense of $13,276.81; the increase of expense being fully accounted for by the increase of postage to the larger number of pensioners on the rolls this year than last. And this enormous disbursement has been made by quarterly payments so promptly that no complaints have been made by the beneficiaries, and not a dollar has been lost to the Government. As an evidence that no more machinery or expense is necessary to provide for a much larger pension roll than now paid, as promptly, frequently, and satisfactorily as when there were a much larger number of agencies and a much smaller number of pensioners than now, I would state that in 1877 there were 232,104 pensioners upon the rolls of 57 agencies, and it cost $1.97 to pay each pensioner, or 16 cents to disburse each $1,000, whereas now, with 303,658 pensioners on the rolls with 18 agencies, payments cost 94 cents to each pensioner, or 4.7 cents to disburse each $1,000. As shown, therefore, we are paying 25 per cent. more pensioners at two-thirds less the number of agencies, and at less than one-third the cost. The argument against increasing the number of agencies seems conclusive.

BUILDINGS AND ACCOMMODATIONS.

The force of the office consists of 1,507 employés, clerks, and officers aside from those detailed at your office, and these, except the 240 special examiners in the field, are employed in the various buildings we occupy, as follows: In the main building known as the Shepherd building, corner Twelfth street and Pennsylvania avenue, 638; in the house an-

nexed, being Nos. 409, 411, and 413 Twelfth street, 73; in the house 508 Eleventh street, 28; in the Eagle building, corner Thirteenth street and Pennsylvania avenue, and its annex, 528. These scanty accommodations necessitate crowding a large number of persons in each room, the whole floor space allowed each person being 20 square feet, exclusive of the rooms occupied as the reception room and office of the Commissioner, the Deputy Commissioners, chief clerk, and the assistant chief clerk. The buildings used were not intended for public purposes, and consequently are without the means of proper ventilation. The small number of cubic feet of air per capita and the crowded condition of the rooms render it essential to the health of the employés that some means of artificial ventilation be adopted. I desire to emphasize the vast importance of this, both as regards the health of the employés and the amount and character of the work to be expected. No person can work to advantage in a room crowded with human beings and air vitiated by being breathed by so many. I do not hesitate to say that, with properly arranged and scientific ventilation in the buildings now occupied, one-third more in amount and one-half more in accuracy may be expected from our present working force over what can be produced by the same number of persons crowded together in our present illy-ventilated rooms. I ask that you recommend an immediate appropriation by Congress for this purpose, inasmuch as the contingent fund of the Department is insufficient to justify the expenditure this year. The cost will be but trifling compared with the good to be accomplished, and need not, in my judgment, exceed $5,000.

The building in course of construction on Judiciary Square, intended I believe to be eventually used for the accommodation of the force of this Bureau, will probably not be completed for several years, and hence the urgent necessity for immediate action in the matter of providing the necessary arrangements for ventilation of the rooms now occupied by our force. I am also admonished to the discharge of this duty by the alarming rate of sickness of last winter, due to the illy-ventilated apartments in the buildings then and now occupied.

PENSION POPULATION.

In my last annual report I gave you the results of quite extensive investigation into the subject of the possibilities of the pension business. It was, I thought, quite important to know as nearly as possible what to expect in the matter of future applications. I sought first to ascertain the total number of individuals who enlisted and served in the Army and Navy of the United States; rejecting the re-enlistments, and third and subsequent services, there were, I found, actual individual enlistments during the war 2,063,391. These may be now accounted for as follows:

1.	LIVING.—Individual soldiers and sailors who have *not* applied for pension	962,201
2.	LIVING.—Individual soldiers and sailors who *have* applied for pension	496,721
3.	DEAD.—Leaving pensionable relatives who have *not* applied for pension	72,340
4.	DEAD.—Leaving pensionable relatives who *have* applied for pension	312,029
5.	DEAD.—Leaving no pensionable relatives	220 000
	Total	2,063,391

It is not to be predicated of the above figures that all the 962,301 living who have not applied for invalid pension can or will do so; rather

it is to be believed that the greater portion of these served without contracting a pensionable disability, while many who did contract pensionable disabilities have not and never will apply. At all events all future invalid applications must come from this number. It may be said of the remaining 72,340 who may be represented by pensionable relatives, that probably the larger portion will yet apply.

APPEALS.

During the year claimants in 746 rejected cases have appealed from the judgment of this office to you; 148 of these had not yet been reached by you for action on the 1st day of July, 1883. You have affirmed our action in 433 of the remaining 598 cases, and have reversed our action in 27. This office has reopened 89 of the remainder on its own motion, while 49 have been reopened by your suggestion.

INCREASE UNDER THE ACT OF MARCH 3, 1883.

This act provided that all persons on the pension-roll, and all persons hereafter granted a pension, who while in the naval or military service of the United States and in the line of duty shall have lost one hand or foot, or been totally or permanently disabled in the same, or otherwise so disabled as to render their incapacity to perform manual labor equivalent to the loss of a hand or foot, shall receive a pension of $24 per month.

And those who in like manner have lost either an arm at or above the elbow, or a leg at or above the knee, or shall have been otherwise so disabled as to be incapacitated for performing any manual labor, &c., shall receive a pension of $30 per month.

The operation of this law was to increase the pension of those who were properly receiving $18 to $24 per month, and to those who were properly receiving $24 to $30 per month and involved a readjudication in each case upon these facts. Immediately upon the passage of the act the following regulations were promulgated:

The following regulations are prescribed for the purpose of carrying into effect as speedily as possible the provisions of the act of Congress, approved March 3, 1883, increasing to $30 pensions of those who have lost a leg at or above the knee, or an arm at or above the elbow; and of those who have been so disabled as to be incapacitated for performing any manual labor, but not so much so as to require regular aid and attendance, who are now receiving a pension at the rate of $24 per month; and to $24 per month the pensions of those who have lost one hand, or one foot, or been totally or permanently disabled in the same, or otherwise so disabled as to render their incapacity to perform manual labor equivalent to the loss of a hand or foot, and now receiving $18 per month.

Inasmuch as the said act has immediate effect upon such admitted cases as have been adjudicated at the rates of $24 and $18 per month, respectively, no formal application by the beneficiary is necessary to be made, other than to forward to the Commissioner of Pensions the pension certificate, accompanied by a letter stating, in the handwriting of the pensioner, his present post-office address.

As soon as possible after the receipt of the pension certificate aforesaid the Commissioner will reissue to him a new certificate for the new rate and will forward the same to the proper pension agent to inscribe the name of such pensioner on the roll at the increased rate, and to make the pensioner the proper payment.

In the case of amputation the certificate will be reissued without any further medical examination.

The intervention of an agent or attorney in such admitted cases as are affected by this act being unnecessary, will not be recognized.

There were filed in the office up to and including June 30, 1883, 15,986 applications for increase under this act. Of these, 13,004 were allowed and 1,110 were rejected. Of the remaining 1,872, there awaited a re-

port of medical examination in 1,455, and 409 were under consideration with a view to reduction in the rate of pension upon the report of medical examination already made. The claimants in each instance were given the usual sixty days' notice to enable them to show cause, if any, why the pension should not be reduced. In the cases of 8 pensioners it was believed that they were entitled to receive a higher rate of pension than that provided by this statute, and the necessary action was taken. This included within the operation of the fiscal year the disposal or action upon every application filed even to the last day of the year.

Of the whole number of this class of claims filed, 3,739 were subject to a medical examination to determine their right to an increase. Up to the close of the year reports had been received in 2,336 cases, of which increase was granted in 1,781, or 76 per cent. Increase of pension was denied in 88 cases, or 3.7 per cent. In 409 cases, or 17.5 per cent., reports of medical examinations showed them to be then in receipt of a pension in excess of that to which they were entitled, and the necessary steps were taken to reduce the same, giving first the claimant an opportunity to show cause, if any, why his pension should not be reduced. In this large number for reduction it should be remembered that since the year 1877 no biennial or periodical examinations have been had, and in many of these cases there has been a partial recovery. Having an efficient corps of examining surgeons, I was enabled to have nearly all of the claimants examined by boards of surgeons.

All pensions graded at the rates of $18 and $24 per month for which the beneficiaries have not applied for the increase will, during the present year, be increased, or, in case of equivalent disabilities, be ordered for medical examination before boards, with a view to extend to them the benefit of this act, if found entitled. This number will be small as compared with the number who have applied.

MEDICAL DEPARTMENT.

Perhaps in no branch of the office have such rapid strides of improvement been observed as in the Medical Department. I invite your attention to the report of the Medical Referee, as being replete with interest upon this subject. Each year's recedence from the war period, when, to be pensionable, all disabilities must have had their origin, increases the importance of a careful and expert examination of the medical questions involved. The medical division, as organized at present, consists of a medical referee, Dr. T. B. Hood, and his assistant medical referee, Dr. N. F. Graham, men eminent in their profession and possessing executive ability in a marked degree; 2 medical experts, 1 in anatomy and 1 in nerve lesions; 18 skilled surgeons and physicians, and a complement of clerks. The duties are to properly scan and review the certificates of the medical examining boards and surgeons, and to review the medical and lay evidence in each case, and to decide upon the questions of sequences and of causation of pensionable diseases. The intricate medical problems arising are multiform and perplexing, but the work accomplished by this body of skilled physicians and surgeons is astonishing in quality and quantity, and most satisfactory in every respect.

I regard it as the most important work devolving upon this office, and I congratulate the country and the beneficiaries of our work that it is in the hands of such a conscientious, industrious, and able body of men.

The examination of applicants for invalid pension by boards, consist-

ing of three first-class physicians and surgeons, at points in each State so located with relation to each other that no applicant is required to travel over 40 miles to reach one by rail, in preference to their examination by a single surgeon, too often biased favorably by being the family physician of the subject, or else biased adversely because the claimant is the patient of a rival in practice, is a most wise and timely provision of law, and has worked and will work to the mutual advantage of the meritorious claimant and the Government, and to the disadvantage of the non-meritorious. The liberal fee of $2 has enabled me to attract to and hold in our service some of the most eminent men in the medical profession as members of our boards, and while considerably increasing the cost of this service over the single-surgeon plan, has resulted in a safer basis of adjudication, and in a saving to the Government many times the difference in the cost. When it is remembered that the cases remaining yet to be settled, as well as those now being filed, are largely for the sequelæ of diseases, said to have been contracted in service twenty years since, many of which are with great difficulty differentiated from disabilities consequent upon either advancing age or years of dissolute habits, the vast importance of thorough and searching medical examination will be appreciated. It has been my endeavor to emphasize this feature of our work in every proper way, and I have been ably seconded in my endeavors by the medical boards and by medical officers.

The unexpected number of board examinations for second or third examinations in old cases, first examinations in newly filed ones, and the test or appelate ones in claims for increase have largely increased the cost of this work beyond the expectations of either myself or the medical referee. I therefore shall ask at an early day that, out of the unexpended balance of this year's appropriations for the payment of pensions, much of which is due to the efficiency of this branch of the service, a sufficient sum be placed at my disposal by joint resolution of Congress for the purpose of paying for examinations already made and which will be necessary during the coming year, in order that no relaxation either in the number or the character of these examinations may occur, but that they be kept up to the standard of the past year. At the commencement of the fiscal year of 1883, there were 1,298 single surgeons and but 76 boards, and these in large cities and towns. We have been constantly organizing boards since that time, generally consisting of eminent physicians and surgeons, and in most cases, when it could be done without jeopardizing anything in the way of efficiency, comprising two of one political party and one of another; and we have now 244 boards in full operation and 84 in process of organization. It is my intention to continue organizing boards as rapidly as possible, until they reach 400, which number it is believed will be sufficient to properly examine all applicants thereby. The law now requires that all medical examinations shall be by boards, and only allows them by single surgeon when it is impracticable to bring the claimant before a board. The examinations are required to be thorough and searching, and the certificate is required to contain a full description of the physical condition of the claimant at the time, and include all the physical and rational signs, and a statement of all structural changes, and such certificates must be satisfactorily constructed and full in description, or payment therefor is withheld. This insures care and deliberation in the examination and full certification of the results, and gives this office the evidence necessary for just adjudication.

SPECIAL EXAMINATIONS.

This branch of our service is of great importance, both to the Government and claimant, and is daily increasing in value, by reason of experience and contact with the people among whom the special examiners conduct their investigations.

The greatest difficulty encountered by those who are charged with the duty of judicially determining the merits of claims for pension, and deciding questions affecting title thereto, arises amongst other causes, from the fact that an *ex parte* presentation of the evidence is often given an undue bias by the remote claim agent who prepares it, and the carelessness with which already prepared affidavits are signed by reputable affiants without a full knowledge of their contents. Material facts are thus specifically sworn to, aspiring to prove trivial events (which in the particular case become important and quite material) after a lapse of twenty years, stated in the language of an unknown person, often squarely contradicting the facts disclosed by the record made at the time by those officers whose duty it was to make it from an unprejudiced standpoint. I mention this to call attention to the necessity of a cross-examination of material witnesses who are uncorroborated by or contradict a record made at the time. To be just and fair this should always be done in the presence of the claimant or some one interested in his behalf, and is accomplished by the methods of specially examining such cases now in use.

The necessity for scrutiny and care in cases involving the expenditure of the large sum now carried by the allowance of each pension, and the detection and punishment of the violation of the pension laws, were apparent to the very able committee of the Forty-sixth Congress, whose report, No. 387, was made March 3, 1881, and contained these words:

> We deprecate the necessity of an investigation of a secret nature whereby the claimant may be deprived of a title to a pension, and we recommend the practice, so far as it is possible and consistent with the interests of the Government, of giving notice of an investigation involving the rights of the soldier, and an opportunity of meeting witnesses who testify against him face to face, and of producing witnesses in rebuttal.

The division of special examinations is organized and conducted strictly upon this basis, and I point to the work performed and the results accomplished by the officers and special examiners acting under my instructions as the best evidence of the desirability, nay necessity, of such work and the increased savings affected by this "fair-play" method. Table 7 presents the results of a year's work in a compact and easily understood form, and the report of the acting chief of the division appended to this report goes fully into details. Some complaint has been made that cases referred to this division for action are unnecessarily delayed. That such delays do occur is true, but they are, from the circumstances of the case, necessary and are rapidly diminishing.

First. The division is burdened by an accumulation of old cases in which claimants assert that the same have been unfairly examined under a former secret *ex parte* method. These require a long and patient reexamination and are the most fruitful source of delays.

Second. The division has been constantly and steadily increasing in numbers; the men recently sent out necessarily being new to their duties, and some of them proving unfit for them, have, in many instances, been recalled and replaced by others. In short, the disposition of

the force being for the first year to some degree tentative, it has required time to properly prepare examiners, steadily increase their numbers, and adjust such a large field force, so as to get from it the best results; and this has occasioned annoying and yet necessary delays to cases in their hands.

There are now 240 special examiners actively engaged in investigating cases, and for the most part they are now sufficiently experienced and tested to prove their fitness to remain. I have divided the country into districts, with an examiner in each, and have grouped them into sections of ten or twelve, with an experienced and expert examiner over each section as supervisor; the work is thus being accelerated and better results reached by these means. There are about 14,500 cases now on hand for special examination; 6,200 examinations were completed and reported last year, even with the shifting experimental force above referred to at work. I shall continue to increase the number of details of our best examiners until the field force shall catch up with the work assigned it, and then shrink it gradually to the lowest number compatible with quick and thorough work.

Mr. McCalmont, formerly the chief of this division, under whose supervision it was organized and developed, resigned on July 1, 1883, as chief, by reason of the failure of his health, and was assigned a supervising district, and I have secured the services of Mr. E. G. Rathbone, late of the Treasury Department, a man adapted in every respect to the development of this branch of our service, to take his place. He has thrown himself into the work with energy, and is giving personal supervision to the division of the country into districts and assignment of examiners and supervisors thereto, and already the influence of this work is being felt in accelerated results. It is believed that the net savings to be effected by this division in the coming year will be sufficient to defray the entire cost of this Bureau to the Government for salaries, rents, and all expenses—I shall be disappointed if it does not, inasmuch as the work of the past year has more than one-half accomplished this result.

INDIAN PENSIONERS.

It is impossible to adjudicate the claims of Indians to pension upon any *ex parte* presentation of their cases. This fact became apparent in 1882, and I determined to take steps to settle this class of business at as early a day as possible. Consequently, with your sanction, I dispatched to the Indian Territory a commission consisting of Mr. A. Vangueder, chief of the miscellaneous division of this office, an experienced examiner, who served with the Indian regiments during the war; Mr. C. R. Connor, one of the most experienced special examiners of the force, and Messrs. S. C. Benjamin and R. D. Goodell, clerks of this office. They started April 10 and returned July 23, 1883, having, in the face of serious obstacles, such as high waters, tribal wars, and other disturbances, succeeded in settling about 140 out of 370 claims of Indian soldiers and their dependents then pending.

They were, however, compelled to leave many unsettled, owing to the failure of the Indians to appear after due notice. Having in this way afforded these Indian claimants such abundant opportunity to come forward with their proof, I think it is not incumbent upon the Government to be at any considerable further expense in the premises. The work of the commission was principally confined to claimants from the three United States Indian volunteer regiments, and did not embrace the claims of those Indians who served with the Kansas regiments, and

who are located in the remote parts of the Indian Territory, as it was impossible to reach them. A full report of the doings of this commission is contained in the special report submitted herewith, marked Exhibit A. Should the Treasury Department see fit to send its agents there hereafter, to settle the bounty and pay claims of these Indians, it might be well for this Department to send an examiner likewise, and endeavor thus to finish the work of settling their pension claims; but unless that is done, I do not believe that the claimants can be reached in sufficient numbers to justify another experiment. Those granted pensions will be paid by the Topeka pension agent in March of each year, at designated points within the Territory, in coin silver, a method which commends itself to them and insures the reception of the full amount of their pensions without discount.

There are about thirty aged Indians residing in the State of New York upon the Cattaraugus Reservation, who claim to have served the United States in the war of 1812, and who up to this date have been denied the pensions given to other survivors of that war, upon the ground that they served as allies merely, and did not perform a pensionable service, *i. e.*, as regularly-mustered United States soldiers or sailors. I append to this report (see Exhibit B) the correspondence had with them through the honorable Commissioner of Indian Affairs, and a copy of resolutions adopted by them at their council July 23, 1879.

I recommend that the act of March 9, 1878, be so amended as to grant these Indian survivors of the war of 1812 the same pension granted to regularly enlisted and mustered soldiers of the United States of that war.

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LISTS OF PENSIONERS.

In response to the resolution of the Senate passed December 8, 1882, the whole clerical force of the several pension agencies was put at work, as soon thereafter as the necessary precedent arrangements could be made, to prepare the list of pensioners called for. It was necessary that each name should be put upon a slip containing the desired information. The 300,000 slips were then forwarded to this office and a large force of clerks detailed to the work of arranging them by post-offices, towns, counties, and States; this being accomplished the slips were then copied upon sheets for the printers, and by pushing the speed of the work at the expense of its accuracy, we succeeded in handing in our report before the adjournment of Congress, with which, had the Senate resolution of inquiry remained unanswered, it would have died. But it was reported in time and sent to the Public Printer. That officer, to accommodate his appropriations, postponed work upon it until after July 1, 1883, and the interim has been utilized in correcting as far as possible the errors occasioned by the undue haste necessarily used in preparing the slips and the copy sheets for the printer. The report when completed will consist of five volumes, octavo, of about 800 pages each, closely printed matter, and will of course be distributed according to the law for the printing and distribution of Executive documents.

I would most earnestly recommend that you suggest to Congress the importance of the general distribution of information of this character, and to that end recommend that Congress at an early day provide for the widest possible dissemination of the information to be conveyed by the publication of this list of pensioners.

I am, and have always been, convinced that the people of the United States, who are enjoying the national prosperity and content so dearly purchased for them by the blood of the dead Union soldiers, and by the sufferings and hardships endured by those who survived—sincerely desire that every soldier who contracted a disability in the service and line of duty, and every widow and minor or dependent of those whose lives were sacrificed, should receive a liberal pension. As their steward I have endeavored to distribute this bounty graciously and speedily. Every surviving Union soldier worthy the name, and the people of our nation generally, when they see the nation's generosity abused, and the unworthy or non-meritorious either receiving pension, or claiming it, and seeking to obtain it by meretricious methods, feel a just indignation. I am glad to say that the means taken to prevent the successful consummation of fraud are reasonably efficient to that end, and it may be easily demonstrated, I think, that such claims are to be found mostly in our rejected files. The publication of the pension list, if generally done, will, I think, allay the fears of many who have hitherto believed that a considerable portion of the money paid out each year for pensions reaches unworthy hands. In my judgment honest, well-meaning, but ill-informed, claimants, or the unwary and deserving pensioner is more frequently defrauded by unscrupulous persons than the Government, and needs protective legislation more.

On July 1, 1882, as shown by my last annual report, there were 1,000,469 living veterans of the late war who, having served their country, and many of them incurred pensionable disabilities, are now engaged in peaceful avocations of civil life, and have never applied for pension. On the 1st day of May, 1865, the Grand Army of the Union consisted of 1,000,516 men and officers. The comparison suggested by these figures is a striking one, and challenges respectful attention from all, but more especially from those who feel inclined to flippantly and thoughtlessly denounce all applicants for pension as fraudulent or unworthy, and all ex-soldiers as greedy for pensions, ready to fill their pockets from the public treasury. It is a fact that unworthy and non-meritorious claims for pension are filed, and occasionally one fraudulent *in toto;* but it is likewise the fact that this class of claims are almost universally rejected, and that to no class of citizens is this office more indebted for efficient aid in preventing such frauds than to the worthy veteran citizen-soldier. If it were wise to publish the list of pensioners at all, and of this Congress must of course be the judge, it should, I think, be widely published, and every paper in the land afforded an opportunity to print the list of those pensioners residing within the radius of its own circulation Such information should not be for the few but for all.

CLERICAL FORCE AND EFFICIENCY.

By the appropriation act of August 5, 1882, the force of this office was increased from 770 officers and clerks of all grades to 1,559, and by the appropriation act passed March, 1883, reduced to 1,537.

The following table will show the increase and fluctuations of the force from month to month for the year:

Force.	Salary.	1882.						1883.					
		July.	August.	September.	October.	November.	December.	January.	February.	March.	April.	May.	June.
Commissioner	.....	1	1	1	1	1	1	1	1	1	1	1	1
First Deputy Commissioner	.....	1	1	1	1	1	1	1	1	1	1	1	1
Second Deputy Commissioner	.....	1	1	1	1	1	1	1	1	1	1	1	1
Chief clerk	.....	1	1	1	1	1	1	1	1	1	1	1	1
Assistant chief clerk	.....	....	1	1	1	1	1	1	1	1	1	1	1
Medical referee	.....	1	1	1	1	1	1	1	1	1	1	1	1
Assistant medical referee	.....	....	1	1	1	1	1	1	1	1	1	1	1
Qualified surgeons	$2,000	....	.....	.....	2	2	2	2	2	2	2	2	2
Medical examiners	1,800	....	.....	3	14	14	14	14	15	14	15	15	15
Law clerk	.....	....	1	1	1	1	1	1	1	1	1	1	1
Chiefs of divisions	2,000	....	12	12	12	12	12	12	12	12	12	12	11
Assistant chiefs of divisions	1,800	....	24	24	24	24	24	24	24	24	24	24	24
Principal examiners	2,000	....	35	35	35	35	35	35	35	35	35	35	35
Clerks	2,000	20	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Clerks, class 4	1,800	64	51	55	63	64	64	64	64	64	65	64	65
Clerks, class 3	1,600	47	59	58	91	92	94	95	95	95	95	95	95
Clerks, class 2	1,400	143	235	245	363	376	384	388	385	383	388	387	384
Clerks, class 1	1,200	250	329	381	367	384	387	393	382	387	390	394	394
Clerks	1,000	106	160	223	229	236	247	249	244	237	244	248	220
Superintendent of building	1,400	....	.....	1	1	1	1	1	1	1	1	1	1
Engineers	1,200	....	.....	2	2	2	2	2	2	2	2	2	2
Copyists	900	44	134	199	144	149	146	150	147	141	147	149	143
Copyists	720	21	15	27	36	39	39	39	40	40	40	40	37
Copyists	600	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Messengers	840	28	19	22	18	20	20	20	20	20	20	20	19
Assistant messengers	720	11	21	21	.....	.....	.....	.....	.....	.....	.....	.....	.....
Watchmen	720	8	11	36	24	25	25	25	25	24	24	25	24
Laborers	660	21	25	33	24	25	25	25	25	25	25	24	24
Laborers	480	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total	.....	770	1,138	1,384	1,457	1,508	1,529	1,546	1,526	1,514	1,537	1,545	1,503

By the last of August, 1882, 368 new clerks had been appointed and entered upon duty, and thenceforward the newly appointed persons rapidly reported until January 1, 1883, when the maximum was reached. The new clerks were assigned to duty as their ability seemed to indicate, and put at preliminary work as examiners or as clerks, and the most experienced men in each division were detailed to give them instruction. Having been placed under this thorough system of teaching, with the aid of the treatise upon the practice prepared by Deputy Commissioner Walker, and published about this time, the examiners became rapidly fitted to handle cases, and the benefit of this work was soon felt in the increased amount of work accomplished. The probation of six months upon which all appointments were made by you, proved a most wise precaution, for about 10 per cent. failed to exhibit the ability needed in a useful examiner or clerk, and were replaced by others more promising.

The speedy and proper adjudication of pension claims depends upon the judgment and qualifications of the examining force who have the work in hand. Their action involves a thorough acquaintance with the law in its general application to pensions, the rules of the office, as well as ability to fix the proper value of evidence presented. Primarily the examiner gathers the evidence, weighs it, and when, in his judgment, it is sufficient he expresses his conclusions in a brief and succinct statement. The possession of that peculiar quality known as "common sense" is exceedingly important in the determination of the rights of parties. On the one hand are the interests of the claimant, his misery

or comfort during his lifetime, and of his family after his death; on the other hand, the rights of the Government, whose interests he is in duty bound to protect.

It is also his duty to see to it that the generosity of the Government shall be bestowed according to the letter and spirit of the law, and not diverted to objects not contemplated by its provisions. In other words, he must divest himself of the mantle of charity and mercy and put on the judicial ermine and judge each case upon the evidence. It will be seen that these duties call for qualities so peculiar and important, that it requires in the selection of a force from those possessed of educational acquirements, a careful examination to determine whether the applicant possesses the other qualities necessary to a full understanding of the business in hand. The educated clerk possessed of the other and necessary qualities, will succeed as an examiner of claims for pensions. An educated person without those qualities would not only be a useless factor in the settlement of claims, but would be absolutely dangerous to the business of the office.

These things should be considered by those who might otherwise feel inclined to criticise the office for apparent delays and occasional errors, remembering that the new examining force of this office has been gathered from the people within a brief period—was drawn from all stations and conditions of life—and has been instructed under a heavy pressure of business in a calling new to most of them, and which is of a character peculiarly intricate and responsible.

The present condition of the force as to efficiency is such, however, that I am led to doubt if you could devise a system of making so large a number of appointments in so short a time, by which better selections could have been made.

I have tried to place before each clerk every incentive, by way of appreciation and promotion, to thorough and conscientious work, and have endeavored, in recommending persons for promotion, to select those who, in competition with their fellows for at least four months' time, had earned the best records for capacity, industry, rapidity, accuracy, habits of punctuality, and general deportment. To such, promotion has been granted irrespective of race, influence, or anything else than attainment in the work of this office. I believe this the true measure of fitness for promotion, and can assert from experience that it is conducive to the highest efficiency and discipline.

Each of the principal divisions of this office equals, as regards numbers, responsibility, and dignity, most of the Bureaus of other Departments of the Government; and I do not think it just that their chiefs should only receive the compensation awarded the best clerks in most of them. In this connection I desire to call your attention to the several reports of my chiefs of divisions which are submitted herewith, and form part hereof, and which deserve a thorough perusal, exhibiting, as they do, the ability and capacity of the writers, and showing, even to a casual observer, the great responsibility each carries. May I not ask that you will recommend that the salary of the chief of the Review Board, the chief of the Special Examination Division, the chief of Eastern Middle, Western Southern, and Old War and Navy Divisions be each advanced to $2,500 per annum, and that of their assistants to $2,000 each, and that of chiefs of other divisions to $2,250 each per annum. They richly deserve such recognition of their valuable services and of the dignity of their offices. The increase would not amount in the aggregate to a large sum, but would reward properly a most deserving, painstaking, and industrious class of officers, and put them

upon a more nearly equal footing with officers of other Departments charged with much less responsibility.

CONDITION OF THE WORK.

The large increase of force was given to this office in order that the delays in the settlement of pension claims might be brought to an end. A joint subcommittee of the regular pension committees of both Houses of Congress waited upon the Commissioner of Pensions in December, 1881, and propounded to him substantially this inquiry:

"If your present clerical force is doubled, how soon can you bring up the business of the office so that delays will cease and the office be up with its current work?" I answered in substance "that to shift the responsibility for delay from the office to the claimants, properly, and to settle the claims that were then and would be ready for settlement, it would require three years, in my judgment, if the increase were given me at once; that is to say, I believed that the work might, under such circumstances, be brought to that condition by December, 1884."

Congress did grant the increased force, but not until August 5, 1882, and it was fully November 1, 1882, before the bulk of the new appointees came in and had received sufficient instruction to be of appreciable benefit in forwarding the work, but after that time the efficiency rapidly increased both among the old and new clerks. A careful analysis of the files and inventory of pending claims was begun July 1, 1883, and completed July 15, and on that day the office was practically up with current work. That is to say, every case involving arrears (that is, filed prior to July 1, 1880), and, with few exceptions, all filed subsequent to July 1, 1880, and not involving arrears, had been examined; those ready for settlement had been settled; those awaiting proper calls for evidence were noted; in those requiring further evidence, calls for the same were made; in short, it was found that we had reached the point when nothing further could be done in about 235,000 claims, out of a total of 244,000 pending, until the claimants should produce the requisite evidence called for, or reports called for had been received from the Departments or witnesses or a special examination had at claimant's home, to the extent heretofore shown in treating of that subject.

The coming year will disclose to what extent claimants will be able or inclined to produce the necessary evidence; and as we now have an educated, experienced force of 1,537 clerks, the evidence as fast as produced will receive prompt attention, and, when found sufficient, cases thus delayed will be settled. Those most diligent will be given precedence, of course; and, so far as this office is concerned, all cases proven can be settled without further delay. The reponsibility for delay, save only in the 14,500 cases in the hands of special examiners, is therefore shifted from the Pension Office to the claimants who are in default for evidence. In my judgment, the force therefore may be considerably reduced at the end of the fiscal year July 1, 1884. The amount which will be required to pay the pensioners for the next two fiscal years will depend upon the diligence of claimants in producing testimony to satisfy the requirements now outstanding. That our payment of pensions was $39,000,000 less this year than estimated for in October, 1881, is due, first, to the close scrutiny given ratings of disabilities, and, second, to the fact that the arrears cases have been so slowly proven. The present force can easily settle enough cases to expend during the incoming fiscal year the full amount of the available appropriations if claimants will do their part by responding to our calls for evidence with

such proof as will satisfy the requirements made. I have requested seventy of the most experienced officers and examiners of this office to give me their best estimate, based upon their intimate knowledge of the pending cases and their many years of experience in examining proofs, as to what proportion of the 148,000 pending claims which, if allowed, would carry arrears, will eventually be allowed upon proper proof, provided the rules of practice and the pension laws remain as now established.

The average of their estimates is that 60 per cent. of the 148,000, or 88,800 claims, will be eventually proven and allowed, and in this net judgment of seventy experienced men I concur. This estimate, based as it is upon experience and intimate knowledge, I believe to be valuable and reliable.

As before shown, so far as this office is concerned, these may be settled before July 1, 1884, and for the sake of the disabled veterans and widows and children of the dead defenders of our country to be benefited, as well as that the "high-water" mark in the annual expenditure for pensions may be speedily reached, I trust the evidence may be forthcoming to enable us to accomplish this much-to-be-desired end.

CONCLUSION.

* * * * * * *

The multiplicity of important duties devolving upon the Bureau over which I preside, and the deep and intense interest exhibited by all classes of the people in the work intrusted to us, combined with the fact that this has been in many respects the maximum year in the history of this office, must be my apology for going so fully into details as I have in this report.

In conclusion let me express to you and your assistants my warmest thanks for the distinguished consideration shown me during the past year, and to subscribe myself,

Most respectfully, your obedient servant,

W. W. DUDLEY,
Commissioner.

Hon. H. M. TELLER,
Secretary of the Interior.

REPORT OF THE COMMISSIONER OF RAILROADS.

DEPARTMENT OF THE INTERIOR,
OFFICE COMMISSIONER OF RAILROADS,
Washington, D. C., November 1, 1883.

SIR: In compliance with the statutory requirements of the act of June 19, 1878 (20 Stat., 169), I have the honor to submit the following report in regard to the operations of this Bureau, and of the condition of the property, business, and accounts of the several railroad companies whose geographical location "is in whole or in part west, north, or south of the Missouri River, and to which the United States have granted any loan or credit or subsidy in bonds or lands."

The accountants of this office have thoroughly investigated the financial condition of the several bonded railways, and have ascertained the amount of net earnings of which the Government is entitled to 25

per centum under the act of May 7, 1878. The results of these examinations will be found in the detailed reports on the Union and Central Pacific Railroads, respectively. Statements in detail of the earnings and expenses, financial condition, and physical characteristics of the various land-grant railways have been compiled from examinations and returns made, and are submitted herewith. The majority of the roads so aided have accorded to officers of this Bureau every facility for the proper examination of their properties and accounts, and a praiseworthy spirit of progress and improvement was observed.

CONDITION OF TRANSPORTATION ACCOUNTS.

Appendix 7 of this report shows in detail the condition of the transportation accounts of the indebted Pacific Railroads to the Government to be as follows:

Transportation services performed for the United States to December 31, 1882, as shown by companies' books		$27,795,541 34
Less one-half of charges for transportation prior to 1873, paid to the companies	$4,295,187 98	
[Act of March 3, 1873, requires *all* transportation performed for the Government to be withheld. Prior to that time one-half of amount was paid to the subsidized railroads.]		
One-half retained and applied to the credit of the companies, prior to 1873	4,204,471 03	
Transportation services performed and settled for prior to the act of 1873		8,499,659 01
Remainder applicable to "repayment of interest," to the payment of "5 per cent. of net earnings," and to the payment of requirement for U. S. "sinking fund"		19,295,882 33
APPLICATION.		
Included in this remainder of $19,295,882 33 is transportation on non-aided lines operated by the subsidy roads, amounting to	3,650,582 23	
To which add one-half of remaining transportation on subsidy portions	7,822,650 05	
Total to bond and interest account		$11,473,232 28
One-half transportation ($15,645,300.10) on subsidized portions, to sinking-fund account		7,822,650 05
Total		19,295,822 33

The total cash payments to December 31, 1882, which have been required from the companies, in addition to the retention of the entire compensation for services, are as follows:

Central Pacific		$1,282,264 44
Central Branch Union Pacific		6,926 91
Union Pacific	$2,733,513 93	
Less balance due the Kansas Pacific for excess of transportation over and above the annual requirement for 5 per cent. of its net earnings to December 31, 1881	1,005,771 39	
		1,727,742 54
Total		3,016,933 89

The Central Pacific Railroad Company has deposited in cash $1,282,264.44 in the Treasury, but the balance of $1,727,742.54 due from the Union Pacific Railway Company, which owns and operates the Kansas Pacific Railway as one of its divisions, has not been finally adjusted, owing to the fact that the company claims that items for new construc-

tion and new equipment should be deducted from gross earnings before ascertaining the "net earnings," of which the Government is entitled to 25 per centum. This controversy is of long standing. At the instance of this office the whole subject was referred by the Secretary of the Interior to the Department of Justice, and is now under the direction of the Attorney-General.

PASSENGER AND FREIGHT MILEAGE AND RATES.

The following table shows the mileage and rate of compensation for the years 1878, 1879, 1880, 1881, and 1882 of twelve of the leading representative roads of the United States.

The low average mileage of the Central Pacific is occasioned by about four-fifths of the passenger traffic, being what is known as "ferry passengers," the haul of which is about 6 miles, thus proportionately reducing the general or average mileage:

Miles traveled per passenger, with average rate per mile.

Names of roads.	1878.		1879.		1880.		1881.		1882.	
	Per pass.	Rate.	Per pass.	Rate.	Per pass.	Rate.	Per pass.	Rate.	Per pass.	Rate.
	Miles.	*Cents.*	*Miles.*	*Cents.*	*Miles.*	*Cents.*	*Miles.*	*Cents.*	*Miles.*	*Cents.*
Union Pacific	511	3.27	484	3.20	.....	.....	166	3.34	161	3.30
Central Pacific	26	2.96	27	2.72	29	3.04	31	3.07	33	2.92
Louisville and Nashville	58	3.37	57	3.45	54	3.51	32	3.40	40	2.71
Atchison, Topeka and Santa Fé	147	3.00	140	3.06	146	3.35	.....	.....	149	3.39
Chicago and Northwestern	35	2.80	35	2.80	35	2.70	37	2.53	39	2.52
Chicago, Milwaukee and Saint Paul	46	3.09	50	2.93	52	2.84	46	2.86	51	2.58
Chicago, Rock Island and Pacific	40	2.97	42	2.97	44	2.80	45	2.67	43	2.51
Lake Shore and Michigan Southern	49	2.29	50	2.22	53	2.14	56	1.99	55	2.16
New York, Lake Erie and Western	29	2.19	35	2.09	33	2.04	33	2.02	33	1.95
New York Central and Hudson River	34	2.01	36	2.02	40	1.99	42	1.86	42	1.80
Pennsylvania	27	2.36	26	2.28	26	2.25	25	2.18	23	2.25
Boston and Albany	19	2.34	19	2.14	19	2.08	20	1.97	20	1.99

Number of miles per ton of freight, with average rate per ton per mile.

Names of roads.	1878.		1879.		1880.		1881.		1882.	
	Per ton.	Cents.	Per ton.	Cents.	Per ton.	Cents.	Per ton.	Cents.	Per ton.	Cents.
	Miles.	*Rate.*	*Miles.*	*Rate.*	*Miles.*	*Rate.*	*Miles.*	*Rate.*	*Miles.*	*Rate.*
Union Pacific	434	2.27	439	1.99	.....	.....	379	1.99	349	1.89
Central Pacific	219	2.75	211	2.78	264	2.34	266	2.14	290	1.81
Louisville and Nashville	84	1.66	85	1.53	149	1.01	96	1.55	91	1.35
Atchison, Topeka and Santa Fé	218	2.12	242	2.51	280	2.43	.....	.....	257	2.29
Chicago and Northwestern	160	1.72	160	1.56	155	1.49	147	1.47	146	1.47
Chicago, Milwaukee and Saint Paul	165	1.80	197	1.72	155	1.76	163	1.70	184	1.48
Chicago, Rock Island and Pacific	209	1.56	228	1.43	231	1.21	211	1.22	210	1.28
Lake Shore and Michigan Southern	220	.73	230	.64	222	.75	221	.62	206	.63
New York, Lake Erie and Western	199	.97	191	.78	198	.84	179	.81	164	.75
New York Central and Hudson River	265	93	255	.81	240	.87	228	.78	211	.73
Pennsylvania	158	.92	156	.80	150	.88	146	.80	114	.87
Boston and Albany	125	1.13	119	1.10	113	1.21	110	1.04	110	1.07

I have also had prepared a table of the earnings, mileage, and rates of compensation for passenger and freight traffic over the Union and Central Pacific roads from the first year of their operation to the latest yearly returns, as complete as the data accessible would admit. They show a steady increase in mileage and volume of business and decrease in rates of compensation.

Central Pacific Railroad.

Years.	Number of miles.	Passengers. Number.	Carried one mile.	Gross receipts.	Average per passenger per mile.	Freight. Gross tons.	Carried one mile.	Gross receipts.	Average per ton per mile.	Per passenger.	Per ton.
					Cents.				*Cents.*	*Miles.*	*Miles.*
1870	992.07			$3,581,506 18		442,890		$3,232,479 25			
1871	1,054.84			3,486,239 29				4,633,811 75			
1872	1,176.41		106,120,000	4,065,210 00	3.83	948,114	190,510,000	6,967,444 58	3.66		200
1873	1,254.48		120,858,000	4,418,417 42	3.66	941,000	248,793,000	7,462,894 92	3 00		264
1874	1,265.97		134,318,000	4,723,866 94	3.52	1,029,000	280,395,000	7,986,894 92	2.85		272
1875	1,349.28		168,336,000	5,509,389 32	3.27	1,096,000	316,593,000	9,938,303 58	3.14		289
1876	1,423.94	5,772,659	172,639,000	5,589,304 43	3.24	1,284,000	363,460,000	10,773,618 34	2.96	30	283
1877	1,905.95	6,275,979	181,715,000	5,483,704 35	3.02	1,415,000	363,542,000	10,095,349 87	2.78	29	257
1878	2,118.74	6,978,188	178,773,325	5,204,913 07	2.96	1,787,786	392,281,710	10,802,276 40	2.75	26	219
1879	2,325.25	6,803,479	180,779,711	4,919,864 63	2.72	1,864,335	392,950,000	10,934,573 39	2.78	27	211
1880	2,492.26	6,707,345	191,415,400	5,819,794 23	3.04	2,140,879	565,063,768	13,245,857 79	2.34	29	264
1881	2,707.00	7,032,366	218,117,760	6,692,828 27	3.07	2,757,193	733,285,889	15,842,139 01	2.14	30	266
1882	3,111.81	7,688,514	255,824,363	7,474,216 12	2.92	3,109,697	902,981,309	16,302,882 72	1.81	33	290

Union Pacific Railway.

Years.	Number of miles.	Passengers. Number.	Carried one mile.	Gross receipts.	Average per passenger per mile.	Freight. Number of tons.	Carried one mile.	Gross receipts.	Average per ton per mile.	Per passenger.	Per ton.
					Cents.				*Cents.*	*Miles.*	*Miles.*
1870	1,038.68	142,623	74,917,335	$3,818,627 55	5.10		71,779,106	$3,038,514 71	4.26	525	
1871	1,038.68	130,561	73,904,927	3,123,510 08	4.22		134,205,887	3,629,488 94	2.70	568	
1872	1,038.68	165,688	80,663,871	3,370,312 41	4.18		178,145,755	4,768,419 07	2.67	487	
1873	1,038.68	174,994	95,709,054	3,887,204 48	4.06	487,484	223,361,542	5,516,907 58	2.47	547	458
1874	1,038.68	188,877	105,138,205	3,952,858 55	3.76	482,000	262,238,837	5,664,731 33	2.16	556	544
1875	1,038.68	209,831	132,591,343	4,346,014 00	3.28	501,410	269,414,989	6,641,512 00	2.47	632	537
1876	1,038.68	202,648	128,032,924	4,307,002 00	3.36	629,947	292,002,076	7,304,123 00	2.50	632	464
1877	1,038.68	185,691	107,883,371	3,599,756 00	3.34	716,112	334,044,870	7,597,681 00	2.27	581	467
1878	1,038.68	168,315	96,304,250	3,150,409 00	3.27	844,019	366,014,080	8,295,878 00	2.27	511	434
1879	1,038.68	207,020	100,151,148	3,207,910 00	3.20	992,886	436,054,149	8,692,414 00	1.99	484	439
1880	1,816.73			5,405,125 00				15,218,507 00			
1881	1,820.90	807,141	153,570,005	5,131,571 39	3.34	2,065,030	783,331,084	15,559,528 00	1.99	166	379
1882	1,820.00	981,420	157,327,336	5,197,709 96	3.30	2,101,635	732,791,054	13,905,489 63	1.89	161	349

CONDITION OF THE BOND AND INTEREST ACCOUNT.

The public debt statement issued by the Treasury Department June 30, 1883, shows the condition of the accounts with the several Pacific Railroad Companies, but takes no account of moneys in the sinking funds held by the Treasurer of the United States, or of the compensation for services not at that time settled by the accounting officers. In the following statement the semi-annual interest which matured July 1, 1883, is included under the heading "Interest paid by the United States."

Name of railway.	Principal outstanding.	Interest accrued and not yet paid by the United States.	Interest paid by the United States.	Interest repaid by transportation to credit of bond and interest account.		Balance of interest paid by the United States.
				By transportation services.	By cash payment, 5 per cent. of net earnings.	
Central Pacific	$25,885,120 00	$776,553 60	$23,452,555 27	$4,592,158 25	$648,271 96	$18,212,125 06
Western Pacific	1,970,560 00	59,116 80	1,668,248 94	9,367 10	.....	1,658,881 94
Union Pacific	27,236,512 00	817,095 36	24,957,850 41	8,933,292 87	.....	16,024,557 54
Kansas Pacific	6,303,000 00	189,090 00	6,129,333 09	2,969,049 59	.....	3,160,283 50
Central Branch U. P.	1,600,000 00	48,000 00	1,549,808 26	152,157 10	6,926 91	1,390,724 25
Sioux City & Pacific	1,628,320 00	48,849 60	1,464,297 49	121,355 39	.....	1,342,942 10
Total	64,623,512 00	1,938,705 36	59,222,093 46	16,777,380 20	655,198 87	41,789,514 39

The total indebtedness of the several subsidized Pacific Railroads to the United States on June 30, 1883, is as follows:

TOTAL DEBT.

Union Pacific (including Kansas Pacific):		
Principal	$33,539,512 00	
Accrued interest	31,087,183 50	
		$64,626,695 50
Central Pacific (including Western Pacific):		
Principal	27,855,680 00	
Accrued interest	25,120,304 21	
		52,975,484 21
Sioux City and Pacific:		
Principal	1,628,320 00	
Accrued interest	1,464,297 49	
		3,092,617 49
Central Branch Union Pacific:		
Principal	1,600,000 00	
Accrued interest	1,549,808 26	
		3,149,808 26
Total		123,845,605 46

TOTAL CREDIT.

Transportation services performed and money paid into the Treasury:

Union Pacific:		
Transportation services, applied to bond and interest account	$11,902,342 46	
Half transportation, applied to sinking fund under act of May 7, 1878	1,536,379 10	
Interest on sinking-fund investments	96,318 49	
		$13,535,040 05

Central Pacific:		
Transportation services, applied to bond and interest account	$4,601,525 25	
Cash payment, 5 per cent. net earnings, under acts of 1862 and 1864	648,271 96	
Cash payment, sinking fund, under act of May 7, 1878	633,992 48	
Half transportation applied to sinking fund, under act of May 7, 1878	1,650,452 68	
Interest on sinking-fund investments	119,570 70	
		$7,653,813 07
Sioux City and Pacific:		
Transportation services applied to bond and interest account		121,355 39
Central Branch Union Pacific:		
Transportation services applied to bond and interest account	$152,157 10	
Cash payment, 5 per cent. net earnings, under acts of 1862 and 1864	6,926 91	
		159,084 01
Total		21,469,292 52
Balance in favor of the United States, but not due until maturity of principal, 1895-'99		102,376,312 94

RECAPITULATION.

Due from Union Pacific	$51,091,655 45
Due from Central Pacific	45,322,671 14
Due from Sioux City and Pacific	2,971,262 10
Due from Central Branch Union Pacific	2,990,724 25
Total	102,376,312 94

In this connection I submit the following table showing the number of miles which have been aided, the date of acceptance by the President, date of issue of bonds, amount of principal which the several Pacific Railroads have received from the United States, and the amount of interest to maturity:

UNION PACIFIC RAILROAD.

Section number.	Miles.	Date of acceptance by the President of the United States.	Date of issue of bonds.	Amount of principal.	Interest at 6 per cent. for 30 years.	Total principal and interest.
1	40	Jan. 24, 1866	Jan. 27, 1866	$640,000 00	$1,152,000 00	$1,792,000 00
2	25	May 1, 1866	May 7, 1866	400,000 00	720,000 00	1,120,000 00
3	40	June 25, 1866	June 26, 1866	640,000 00	1,152,000 00	1,792,000 00
4	20	July 12, 1866	July 13, 1866	320,000 00	576,000 00	896,000 00
5	35	Aug. 8, 1866	Aug. 9, 1866	560,000 00	1,008,000 00	1,568,000 00
6	45	(*)	Sept. 11, 1866	720,000 00	1,296,000 00	2,016,000 00
7	35	Oct. 12, 1866	Oct. 13, 1866	560,000 00	1,008,000 00	1,568,000 00
8	30	Nov. 6, 1866	Nov. 7, 1866	480,000 00	864,000 00	1,344,000 00
9	35	Jan. 2, 1867	Jan. 8, 1867	560,000 00	1,008,000 00	1,568,000 00
10	40	June 10, 1867	June 10, 1867	640,000 00	1,152,000 00	1,792,000 00
11	40	July 5, 1867	July 6, 1867	640,000 00	1,152,000 00	1,792,000 00
12	35	Aug. 27, 1867	Aug. 29, 1867	560,000 00	1,008,000 00	1,568,000 00
13	35	Oct. 1, 1867	Oct. 2, 1867	560,000 00	1,008,000 00	1,568,000 00
14	35	Nov. 4, 1867	Nov. 5, 1867	560,000 00	1,008,000 00	1,568,000 00
15	20	Dec. 11, 1867	Dec. 13, 1867	320,000 00	576,000 00	896,000 00
16	15 7/10 / 14 2/10	Jan. 25, 1868 / Jan. 25, 1868	Jan. 27, 1868 / Jan. 27, 1868	957,000 00	1,722,600 00	2,679,600 00
17	20	May 15, 1868	May 16, 1868	960,000 00	1,728,000 00	2,688,000 00
18	20	May 16, 1868	May 18, 1868	960,000 00	1,728,000 00	2,688,000 00
19	20	June 12, 1868	June 12, 1868	960,000 00	1,728,000 00	2,688,000 00
20	20	June 16, 1868	June 18, 1868	960,000 00	1,728,000 00	2,688,000 00
21	20	July 21, 1868	July 22, 1868	960,000 00	1,728,000 00	2,688,000 00
22 and 23	35 7/10 / 4 2/10	July 23, 1868 / July 23, 1868	July 24, 1868 / July 24, 1868	1,841,000 00	3,313,800 00	5,154,800 00
24	20	Aug. 8, 1868	Aug. 11, 1868	640,000 00	1,152,000 00	1,792,000 00

UNION PACIFIC RAILROAD—Continued.

Section number.	Miles.	Date of acceptance by the President of the United States.	Date of issue of bonds.	Amount of principal.	Interest at 6 per cent. for 30 years.	Total principal and interest.
25	20	Aug. 27, 1868	Aug. 28, 1868	$640,000 00	$1,152,000 00	$1,792,000 00
26	20	Sept. 5, 1868	Sept. 5, 1868	640,000 00	1,152,000 00	1,792,000 00
27	20	Sept. 5, 1868	Sept. 7, 1868	640,000 00	1,152,000 00	1,792,000 00
28	20	Sept. 22, 1868	Sept. 23, 1868	640,000 00	1,152,000 00	1,792,000 00
29	20	Oct. 21, 1868	Oct. 21, 1868	640,000 00	1,152,000 00	1,792,000 00
30	20	Nov. 19, 1868	Nov. 19, 1868	640,000 00	1,152,000 00	1,792,000 00
31	40	Dec. 5, 1868	Dec. 7, 1868	1,280,000 00	2,304,000 00	3,584,000 00
32	20	Dec. 12, 1868	Dec. 14, 1868	640,000 00	1,152,000 00	1,792,000 00
33	20	Dec. 16, 1868	Dec. 16, 1868	640,000 00	1,152,000 00	1,792,000 00
34	20	Dec. 23, 1868	Dec. 23, 1868	640,000 00	1,152,000 00	1,792,000 00
35	20	Dec. 23, 1868	Dec. 24, 1868	640,000 00	1,152,000 00	1,792,000 00
36	20	Jan. 28, 1869	Jan. 29, 1869	640,000 00	1,152,000 00	1,792,000 00
37 and 38	40	Feb. 9, 1869	Feb. 10, 1869	1,280,000 00	2,304,000 00	3,584,000 00
39	20	July 15, 1869	July 16, 1869	640,000 00	1,152,000 00	1,792,000 00
40	13 65/100	July 15, 1869	Nov. 6, 1869	437,000 00	786,600 00	1,223,600 00
41	5	July 15, 1869	July 14, 1870	161,512 00	290,721 00	452,233 60
	1,038 65/100			27,236,512 00	49,025,721 60	76,262,233 60

* Report dated September 1, 1866. No date to President's acceptance.

CENTRAL PACIFIC RAILROAD.

Section number.	Miles.	Date of acceptance by the President of the United States.	Date of issue of bonds.	Amount of principal.	Interest at 6 per cent. for 30 years.	Total principal and interest.
	7 15/100		Jan. 16, 1865	$1,258,000 00	$2,264,400.00	$3,522,400 00
	23 85/100		Aug. 14, 1865	384,000 00	691,200 00	1,075,200 00
1	23		Oct. 16, 1865	256,000 00	460,800 00	716,800 00
			Nov. 29, 1865	464,000 00	835,200 00	1,299,200 00
			Mar. 6, 1866	640,000 00	1,152,000 00	1,792,000 00
	20		Oct. 29, 1866	320,000 00	576,000 00	896,000 00
			July 10, 1866	640,000 00	1,152,000 00	1,792,000 00
2	20	Oct. 24, 1867	Oct. 25, 1867	320,000 00	576,000 00	896,000 00
			Jan. 14, 1867	640,000 00	1,152,000 00	1,792,000 00
3	20	July 9, 1868	July 10, 1868	320,000 00	576,000 00	896,000 00
4	24	Dec. 10, 1867	Dec. 11, 1867	1,152,000 00	2,073,600 00	3,225,600 00
5	19 15/100	June 8, 1868	June 9, 1868	946,000 00	1,702,800 00	2,648,800 00
	85/100	June 8, 1868	June 9, 1868			
6	20	Aug. 3, 1868	Aug. 4, 1868	640,000 00	1,153,000 00	1,792,000 00
7	37	Aug. 12, 1868	Aug. 13, 1868	1,184,000 00	2,131,200 00	3,315,200 00
8	40	Sept. 7, 1868	Sept. 11, 1868	1,280,000 00	2,304,000 00	3,584,000 00
9	35	Sept. 18, 1868	Sept. 19, 1868	1,120,000 00	2,016,000 00	3,136,000 00
10	20	Oct. 10, 1868	Oct. 12, 1868	640,000 00	1,152,000 00	1,792,000 00
	20	Oct. 10, 1868	Oct. 12, 1868	640,000 00	1,152,000 00	1,792,000 00
11	20	Oct. 23, 1868	Oct. 26, 1868	640,000 00	1,152,000 00	1,792,000 00
12	20	Nov. 3, 1868	Nov. 3, 1868	640,000 00	1,152,000 00	1,792,000 00
13	20	Nov. 10, 1868	Nov. 11, 1868	640,000 00	1,152,000 00	1,792,000 00
14	20	Dec. 1, 1868	Dec. 5, 1868	640,000 00	1,152,000 00	1,792,000 00
15	20	Dec. 5, 1868	Dec. 7, 1868	640,000 00	1,152,000 00	1,792,000 00
16	20	Dec. 28, 1868	Dec. 29, 1868	640,000 00	1,152,000 00	1,792,000 00
17	20	Jan. 13, 1869	Jan. 13, 1869	640,000 00	1,152,000 00	1,792,000 00
18	20	Jan. 27, 1869	Jan. 28, 1869	640,000 00	1,152,000 00	1,792,000 00
19	20	Feb. 16, 1869	Feb. 17, 1869	640,000 00	1,152,000 00	1,792,000 00
20	20	May 27, 1869	Feb. 17, 1869	1,066,000 00	1,918,800 00	2,984,800 00
21	20	May 27, 1869	Mar. 2, 1869	1,333,000 00	2,399,400 00	3,732,400 00
22	20	May 27, 1869	May 27, 1869	1,786,000 00	3,214,800 00	5,000,800 00
23	100	May 27, 1869	May 27, 1869	1,314,000 00	2,365,200 00	3,679,200 00
24	20 3/4	July 15, 1869	July 15, 1869	268,000 00	482,400 00	750,400 00
	47 1/4	July 15, 1869	July 16, 1869	1,510,000 00	2,718,000 00	4,228,000 00
			Nov. 28, 1869	4,120 00	7,416 00	11,536 00
	737 4/4			25,885,120 00	46,593,216 00	72,478,336 00

KANSAS PACIFIC RAILWAY.

Section number.	Miles.	Date of acceptance by the President of the United States.	Date of issue of bonds.	Amount of principal.	Interest at 6 per cent. for 30 years.	Total principal and interest.
1	40	Oct. 28, 1865	Oct. 28, 1865	$640,000 00	$1,152,000 00	$1,792,000 00
2	22	Dec. 20, 1865	Jan. 4, 1866	352,000 00	633,600 00	985,600 00
3	23	May 8, 1866	May 8, 1866	368,000 00	662,400 00	1,030,400 00
4	20	July 8, 1866	July 9, 1866	320,000 00	576,000 00	896,000 00
5	25	Oct. 15, 1866	Oct. 15, 1866	400,000 00	720,000 00	1,120,000 00
6	25	Jan. 22, 1867	Jan. 23, 1867	400,000 00	720,000 00	1,120,000 00
7	30	May 4, 1867	May 6, 1867	480,000 00	864,000 00	1,344,000 00
8	25	June 10, 1867	June 10, 1867	400,000 00	720,000 00	1,120,000 00
9	24	Aug. 12, 1867	Aug. 13, 1867	384,000 00	691,200 00	1,075,200 00
10	25	Sept. 19, 1867	Sept. 20, 1867	400,000 00	720,000 00	1,120,000 00
11	26	Oct. 25, 1867	Oct. 26, 1867	416,000 00	748,800 00	1,164,800 00
12	20	Dec. 2, 1867	Dec. 3, 1867	320,000 00	576,000 00	896,000 00
13	30	Jan. 9, 1868	Jan. 14, 1868	480,000 00	864,000 00	1,344,000 00
14	25	Apr. 27, 1868	Apr. 28, 1868	400,000 00	720,000 00	1,120,000 00
15	20	May 30, 1868	June 6, 1868	320,000 00	576,000 00	896,000 00
16	$13\frac{8448}{10000}$	Oct. 31, 1868	Nov. 2, 1868	223,000 00	401,400 00	624,400 00
	$393\frac{8448}{10000}$			6,303,000 00	11,345,400 00	17,648,400 00

CENTRAL BRANCH UNION PACIFIC RAILROAD.

1	20	July 12, 1866	July 19, 1866	$320,000 00	$576,000 00	$896,000 00
2	20	Dec. 6, 1866	Dec. 6, 1866	320,000 00	576,000 00	896,000 00
3	20	Apr. 29, 1867	May 1, 1867	320,000 00	576,000 00	896,000 00
4	20	Dec. 3, 1867	Dec. 3, 1867	320,000 00	576,000 00	896,000 00
5	20	Jan. 20, 1868	Jan. 20, 1868	320,000 00	576,000 00	896,000 00
	100			1,600,000 00	2,880,000 00	4,480,000 00

SIOUX CITY AND PACIFIC RAILROAD.

1	20	Mar. 27, 1868	Mar. 30, 1868	$320,000 00	$576,000 00	$896,000 00
2	$49\frac{80}{100}$	Mar. 9, 1868	Mar. 10, 1868	792,000 00	1,425,600 00	2,217,600 00
3	$32\frac{32}{100}$	Mar. 2, 1869	Mar. 3, 1869	516,320 00	929,376 00	1,445,696 00
	$101\frac{12}{100}$			1,628,320 00	2,930,976 00	4,559,296 00

WESTERN PACIFIC RAILWAY.

1	20	.....	Jan. 26, 1867	$320,000 00	$576,000 00	$896,000 00
2	20	Sept. 1, 1869	Sept. 3, 1869	320,000 00	576,000 00	896,000 00
3	63	Oct. 27, 1869	Oct. 28, 1869	1,008,000 00	1,814,400 00	2,822,400 00
4	$20\frac{18}{100}$	Jan. 21, 1870	Jan. 22, 1870	322,000 00	579,600 00	901,600 00
			Jan. 22, 1872	560 00	1,008 00	1,568 00
	$123\frac{18}{100}$			1,970,560 00	3,547,008 00	5,517,568 00

RECAPITULATION.

From—	To—	Mile posts.	Number of miles.	Bonds per mile.	Total amount of bonds issued.	Land per mile.	Total amount of land covered by grant.	Patented to June 30, 1883.
UNION PACIFIC RAILROAD.						*Acres.*	*Acres.*	*Acres.*
Omaha, Nebr	Nine miles west of Cheyenne	0 to 525.078	525.078	$16,000 00	$8,401,248 00	12,800	6,709,984	.....
Nine miles west of Cheyenne	Dana, Wyo	525.078 to 675.078	150.	48,000 00	7,200,000 00	12,800	1,920,000	.....
Dana, Wyo	Five miles west of Ogden, Utah	675.078 to 1,038.068	363.602	32,000 00	11,635,264 00	12,800	4,654,105	.....
Total		.....	1,038.680	.....	27,236,512 00	.....	13,384,089	1,954,523.08
KANSAS PACIFIC RAILWAY.								
Kansas City, Mo	To a point between Monument and Gopher Stations, Kans.	0 to 393.9425	393.9425	16,000 00	6,303,000 00	12,800	5,042,464	963,714.03
Total both roads		.....	1,432.0105	.....	33,539,512 00	.....	18,426,553	2,918,237.11
CENTRAL PACIFIC RAILROAD.								
Sacramento, Cal	Arcade, Cal	0 to 7.18	7.18	16,000 00	114,880 00	12,800	91,904	.....
Arcade, Cal	Near Reno, Nev	7.18 to 157.18	150	48,000 00	7,200,000 00	12,800	1,920,000	.....
Near Reno, Nev	Five miles west of Ogden, Utah	157.18 to 737.50	580.32	32,000 00	18,570,240 00	12,800	7,428,096	.....
Total		.....	737.50	.....	25,885,120 00	.....	9,440,000	780,879.40
WESTERN PACIFIC RAILROAD.								
San José, Cal	Brighton, Cal	0 to 123.16	123.16	16,000 00	1,970,560 00	12,800	1,576,448	446,230.65
Total both roads		.....	860.66	.....	27,855,680 00	.....	11,016,448	1,227,110.05
CENTRAL BRANCH UNION PACIFIC RAILROAD.								
Atchison, Kansas	Waterville, Kans	0 to 100	100	16,000 00	1,600,000 00	12,800	1,280,000	187,447.99
SIOUX CITY AND PACIFIC RAILROAD.								
Sioux City, Iowa	Fremont, Nebr., via California Junction	0 to 101.77	101.77	16,000 00	1,628,320 00	6,400	651,328	41,398.23

CONDITION OF THE SINKING-FUND ACCOUNTS.

Appendix 8 of this report gives a detailed statement showing the condition of the sinking-funds of the Union and Central Pacific Companies, respectively, held by the Treasurer of the United States under the act of Congress approved May 7, 1878, from which it will be seen that on June 30, 1883, these funds amounted to $4,036,713.45; the Central Pacific having to its credit $2,404,015.86, and the Union Pacific $1,632,697.59.

Investments have been made by the Secretary of the Treasury as follows:

Character of bonds.	Central Pacific.	Union Pacific.	Total.
Funded loan of 1881, 5 per cent	$736,700 00	$256,450 00	$993,150 00
Funded loan of 1907, 4 per cent	199,100 00	32,650 00	231,750 00
Currency sixes, 6 per cent	444,000 00	361,000 00	805,000 00
Principal	1,379,800 00	650,100 00	2,029,900 00
Premium paid	179,563 73	124,065 43	303,629 16
Total cost	1,559,363 73	774,165 43	2,333,529 16

On June 30, 1883, the amounts remaining in the United States Treasury, *uninvested*, were as follows:

Credit of the Central Pacific	$844,652 13
Credit of the Union Pacific	858,532 16
Total	1,703,184 29

That the sinking-fund has not accomplished the result anticipated is quite evident, and may be regarded as practically a failure for want of suitable investment. The last investment for the Union Pacific was made April 6, 1881, at which time a premium as high as 35 per centum was paid, but the company repeatedly protested against such high rates of premium. Reference to the foregoing table will show that the sum of $650,100 has been invested at a cost of $124,065.43, or an average premium of nearly 20 per centum. On June 30, 1882, the amount in the sinking-fund uninvested was $407,441.99, and on June 30, 1883, it had increased to $858,532.16. This is a manifest hardship to the company, as the amount should be drawing a fair rate of interest, and correspondingly diminishes the available fund in the hands of the Government.

The last investment for the Central Pacific was made November 27, 1882, the sum of $541,800 having been invested, at a premium of 2 per centum, in the funded loan of 1881 continued at 3½ per centum. The sum of $1,379,800 has been invested for this company at a cost of $179,563.73. On June 30, 1883, the amount in the sinking-fund uninvested was $844,652.13.

Section 3 of the act of May 7, 1878, provides that the "sinking-fund shall be invested by the Secretary of the Treasury in bonds of the United States," and directs that preference be given the 5 per cent. bonds, but it evidently was not foreseen that the 6, 5, and 4 per cent. bonds might be called in or extended at a lower rate of interest.

In my report for 1882, page 12, for reasons there more fully stated, it was recommended—

That section 3 of the act of May 7, 1878, be so amended as to authorize the Secretary of the Treasury to invest the sinking-funds in the first mortgage bonds of the

companies, or such bonds as have been issued to them by the United States, or in other good and sufficient securities, and to convert the bonds now held by the Treasurer of the United States in said sinking-funds into money at the market rates, and reinvest the same in like securities.

This recommendation is respectfully renewed, but it is suggested that if the present sinking-fund method is to be continued, it would be a more simple and equitable plan to have all amounts paid by the companies covered into the Treasury and credited with a certain rate of interest per annum, say 3 per cent., thus avoiding all questions of investments, premiums, &c.

FUNDING THE DEBT.

I again urgently commend to the consideration of Congress the propriety of commuting the present sinking-fund method of payment of the debts of the subsidized railroads to one of fixed obligations having the same lien, and of fixed amounts, and payable at fixed periods.

It is of the first importance that the method adopted should be certain in its operation and result, and have due regard to the security of the Government and the rights of the companies.

* * * * * * *

The purposes of Congress in granting the liberal aid extended to these companies, so forcibly expressed by Justice Davis, were held to be important elements in arriving at the true construction of their charters, and are not now to be overlooked in considering their present relations to the Government. All these purposes have been much more than realized, and it has been frequently and officially stated that the actual saving, year by year, to the Government greatly exceeds the whole annual interest paid.

I am the more convinced that immediate action should be taken by Congress in this matter for the reason that each year demonstrates more clearly the fact that the present sinking fund method is a practical failure, and I invite particular attention to the detailed report on the Central Pacific Railroad Company, from which it will be seen that the earnings on the subsidized portion of the road diminished in greater proportion during the year 1882 than on the non-aided and leased lines. The average decrease on the entire system was $462 per mile; but on the aided portion it was at the rate of $553 per mile, as against $227 on the non-aided portion.

But whether this falling off of earnings on the subsidized portion of the road is due to the natural changes in traffic incident to the opening of new and competing lines, or has been purposely diverted from one line to another, it works equally to the same result in reducing the gross earnings of the roads out of which the 25 per cent. of the net earnings required to be paid under the act of May 7, 1878, is to be derived. But from whatever causes the fact arises, it is not perceived how the Government can interpose to change the direction of transportation of either passengers or freights. Such inquiry would be environed with almost insurmountable difficulties of both law and fact.

The gross receipts of the Union Pacific also decreased, but the diminution of operating expenses left the 25 per cent. of net earnings slightly increased.

Under the decision of the First Comptroller, affirmed and adopted by the Secretary of the Treasury, in his circular of June 27, 1883, the Government is liable to pay in cash for all services rendered by the bonded Pacific railroads over any portions of their road owned, leased, or operated, which have not been subsidized in bonds. The total service for

the Government rendered by the Union Pacific for the year 1882, over all its lines, was $1,139,709.38, of which $932,975.41 was upon the subsidized portion, leaving the sum of $206,733.97 as due the company in cash. The Central Pacific rendered service during the same period amounting to $1,051,862.46, of which $403,754.26 was upon the subsidized line, leaving $648,108.20 as due the company in cash. The services of the Sioux City and Pacific amounted to $30,888.22, of which $10,231.05 was upon the subsidized portion, leaving $20,657.17 as due the company in cash. The Central Branch Union Pacific performed services amounting to $35,287.42, of which $12,538.58 was on the subsidized portion, leaving $22,748 84 as due the company in cash.

It is clear that under this decision, which is in accord with the decision of the Court of Claims in Union Pacific Railway Company *vs.* United States (16 Ct. Cls., 353), the companies have a manifest interest in diverting traffic from the subsidized portions of the road. But if they accept the provisions of a bill which funds the indebtedness in long payments and directs that all moneys for services over the aided lines, or upon any lines owned, leased, or operated by them, be credited upon the books of the Treasury until the bond of redemption next to mature shall have been fully paid, the entire transportation of the Government over all these roads would be pledged and applied to the liquidation of the debt as it matures, and insure its absolute payment within the limited time.

Should the decrease in the earnings of the aided lines continue to even an approximate proportion to the decrease of the last year, it will be readily perceived that the 25 per cent. of net earnings to which the Government is entitled would be so reduced as to render this increasingly inadequate as related to the vast magnitude of the debt.

At the rate provided for in the Thurman act it would require a century or more to accumulate a fund sufficient to discharge this debt, and with strong probability that by this method it cannot be done. Nor would it be practicable to increase the percentage without manifest detriment, as well to the companies as their patrons. The payment, by whatever mode it be collected, must come from the earnings of the road. If the rates be too high the burden falls with onerous weight upon the business, and would work directly in the interest of non-aided competing lines.

It would seem to be of less consequence whether the debt be paid in fifty or sixty, or even a hundred years, if its ultimate payment be absolutely assured, than that oppressive burdens be imposed upon the commerce between the Atlantic and Pacific coasts. A proper net compensation must remain to the owners of the roads, if they are to receive the watchful care and necessary maintenance which safety and success demand.

The construction of these roads has been pronounced by the Supreme Court of the United States, to have been a national necessity so urgent as to admit of no delay, and confessedly involving the integrity of the Union. The energy with which they were built is well illustrated in the fact that they were completed within seven years less time than the limit established by law, and at a time when the currency bonds issued to the companies realized an average of only about 75 per cent. in gold. And they must be repaid at par.

It was doubtless expected that the compensation for Government transportation would equal the current interest; that it has not, has been a disappointment as well to the companies as to the Government,

but had the charges for transportation continued at the rate prior to their construction it would greatly have exceeded the interest.

The Government has the advantage, and is entitled to it, of the reduced expenses of transportation which has resulted from their construction, and in this view the saving to the Government has greatly exceeded the current interest it has paid. It is also fairly to be considered that the national purposes have all been more than realized in the increased sales of public lands, the extension of civilization, the suppression of Indian wars, and the consequent great diminution of expenses, the establishment of States, and the strengthening of the ties which have bound the States of the Pacific coast indissolubly to the Union.

All these considerations appeal with great force to the liberality of Congress, but whatever weight they may have in guiding their discretion, this office can regard the question only in the light of the best method of securing the certain payment of this vast and constantly-increasing debt, and the payment of which, if left to the present methods, is at least doubtful. Upon full consideration of the whole subject, I am strengthened in the convictions expressed in my report for 1882, that the interests of the Government will be best promoted by commuting the present uncertain and variable book-account payments into bonded payments of fixed amounts. It would seem to be judicious that, if such measure be adopted, the act should provide that the largest payments should be made first, whilst the responsibility of the company is known, and by constant and fixed diminution of the debt so reduce the deferred payments that they will not be endangered by any contingencies of the future.

I therefore renew the recommendation—

First. That if the sinking-fund is to be continued, the discretion of the Secretary of the Treasury should be enlarged as to the investment of the fund.

Second. That Congress consider the practicability of commuting the present book-account indebtedness for securities having the same lien and of fixed amount and payable at fixed periods.

RAILROAD RATES.

Appendix 12 gives a summary of the powers conferred and the duties required of the railroad commissioners in the several States in which they have been appointed. Great diversity of State policy as to railroad rates and management is manifest, and the problem of inter-State commerce becomes increasingly important and difficult. Reflection has strengthened my convictions of the necessity of national legislation upon this subject. State legislation is wholly inadequate to control the abuses of which the people so justly complain—especially should the "wars" of rates be controlled in the interests of the people and the roads. They usually arise from selfish conflicts of interests, and often from breach of faith which State legislation cannot control, and they are frequently instigated by merely stock-jobbing speculations.

It is estimated that there were not less than 113,329 miles of railways operated in the United States at the close of the year 1882, which, at the low estimate of $30,000 per mile, have cost over $3,430,000,000. There have been moved upon these roads in the same time 360,500,000 tons of freight, being about 7 tons per head of population, the value of which freight would probably be over $15,000,000,000, or nearly ten times the valuation of the whole foreign trade of the country. The gross receipts were $770,000,000; the payments for interest $149,000,000; for dividends, $102,000,000; and for labor and materials not far from $490,000,000. There were 1,400,000 persons employed in operating

these roads, and probably 400,000 upon construction of new lines, which would be 3¼ per cent. of the whole population of the country directly dependent upon the railways for employment and support.

These vast interests, upon which the prosperity of the whole country is so necessarily dependent, cannot be wisely dealt with except upon the fullest information and with great caution.

It is undoubtedly true that the railroads are subjected to competitions which they cannot control, upon the ocean, the lakes, and upon the rivers, and that such competition has resulted in giving to the United States the cheapest railroad transportation in the world; but this does not justify the continuance of abuses which can and ought to be restrained, with manifest advantage to every interest involved; but such correction, to be effective, must proceed from Federal authority. All the trunk lines run through many States, each independent within its own jurisdiction, and jealous alike of all interference by the General Government, and of the rival and often hostile legislation of adjoining States.

What legislation will judiciously and yet effectively remedy the abuses under which both the companies and the people suffer, is a subject upon which the most experienced differ, and as to which there is much popular misapprehension.

Whilst the State Commissioners exercise in many instances healthful influence on railroad management within their respective State jurisdictions, they are powerless in the presence of abuses, however flagrant, which extend beyond State lines, nor could any unison of State action provide a remedy. The limited jurisdiction of the States involves conflicts with both the General Government and their sister States. Diverse decisions have been rendered by the highest judicial tribunals of neighboring States upon State laws of like import and purpose.

The supreme court of Iowa, in Carlton & Co. *vs.* Illinois Central Railroad Company, decided, February 12, 1882, that "a railroad company has the right, as a common carrier, to make its own contracts and disregard any laws of a State which seek to regulate shipments to parts beyond the limits of the State, such laws being repugnant to the Federal Constitution."

In the United States circuit court for the southern district of Iowa, in the case of William Kaciser *vs.* The Illinois Central Railroad Company, in an opinion filed October, 1883, Mr. Crary, circuit judge, held that—

A statute of Iowa fixing the maximum rate to be charged by railroad companies for carrying freight within the State is invalid so far as by its terms it applies to through shipments from points within the State to points without the State, because it is a regulation of commerce among the States, and if upheld would enable the State to discriminate against the commerce of other States.

The supreme court of Illinois, in The People *vs.* The Wabash, Saint Louis and Pacific Railway Company, decided September 28, 1882, that "while the act of the Illinois legislature of May 2, 1873, to prevent unjust discrimination in the rates of charges of railway companies, may affect commerce, it cannot be said to be a law regulating commerce among the several States within the meaning of the Federal Constitution."

Like diversity is found in the decisions of other States, but the conflicting views are well discussed in the cases cited.

In Myrick *vs.* Michigan Central Railroad Company (107 U. S. R., 109), Mr. Justice Field, delivering the opinion of the court, discussing one branch of the question, says:

If the doctrine of the supreme court of Illinois as to what constitutes a contract of carriage over connecting lines of roads is sound, it ought to govern not only in Illi-

nois, but in other States; and yet tribunals of other States, and a majority of them, hold the reverse of the Illinois court, and coincide with the views of this court. Such is the case in Massachusetts. (Nutting *vs.* Connecticut River Railroad Company, 1 Gray (Mass.), 502; Burroughs *vs.* Norwich and Worcester Railroad Company, 100 Mass., 26.) If we are to follow on this subject the ruling of the State courts we should be obliged to give a different interpretation to the same act—the reception of goods marked for a place beyond the road of the company—in different States, holding it to imply one thing in Illinois and another in Massachusetts.

That Congress has complete jurisdiction of the whole subject is no longer doubted. The Supreme Court of the United States has frequently asserted it, and the State courts have not questioned it.

In Hall *vs.* De Cuir (95 U. S. R., 488), Chief Justice Waite, in a full discussion of the subject, and citing many authorities, says:

We think it may safely be said that the State legislation which seeks to impose a direct burden upon inter-State commerce or to interfere directly with its freedom does encroach upon the exclusive power of Congress.

Justice Clifford, delivering a concurring opinion (p. 491), says:

Power to regulate commerce is by the Constitution vested in Congress; and it is well-settled law that the word "commerce," as used in the Constitution, comprehends navigation, which extends to every species of commercial intercourse between the United States and foreign nations, and to all commerce with the several States, except such as is completely internal, and which does not extend to or affect the other States.

Railroads, in their relation to the business of the country and the harmonious adjustment of their own complex relations, may be said to be still in their infancy—passing through formative discipline and experience, and slowly working towards more just as well as more efficient methods. It would seem to be well that those companies which are disposed to favor stability of administration shall be assisted by the strong force of positive law to resist the obstructive methods of less enlightened and progressive roads.

The universal use and absolute dependence of inter-State commerce upon railroads give constant rise to new questions under new conditions, which only experience can properly solve. It would seem that true wisdom would hasten slowly in dealing with this great problem, seeking the fullest information as the only true basis for wise legislation. The solution must lie in the just application of the laws of trade and commerce, with such authoritative regulation by law as will hold abuses in check, and this power can be derived only from Federal law of universal application. I have felt it to be my duty to again call attention to this subject, although I have not thought it appropriate to discuss the question in detail.

Any law not based upon full information might work great injustice to the companies and be inadequate to the proper protection of the people. Experience has shown that unreasonable laws cannot be enforced, and in many instances have worked such great embarrassment to transportation as to become inoperative by common consent. Many such laws hastily enacted have been quickly repealed.

I therefore respectfully renew my former recommendation that a commission be appointed to take into consideration the whole subject, and report to Congress the facts necessary for intelligent and efficient action upon the subject.

* * * * * * *

THE YELLOWSTONE NATIONAL PARK.

The question of a railroad through the Yellowstone National Park has excited so much discussion that I felt it important to make a per-

sonal inspection of this extraordinary portion of the public domain, as it is a place which will undoubtedly develop a large trade for the Northern, Union, and Central Pacific Railroads. It is reached from the Northern Pacific by a branch road of 51 miles from Livingston, touching the Park near its northwest corner. By the construction of a branch line from the Utah and Northern Railway to the Middle Geyser Basin, commonly known as Marshall's, it can easily be reached from Ogden by both the Central and Union Pacific roads.

The dimensions of the Park are not very well ascertained, as no survey has yet been made, and its boundaries are defined by localities and not by exact measurements. It is usually reckoned as a rectangular parallelogram, 55 miles on its northern and southern boundaries, and 65 miles on its eastern and western boundaries. The points of interest are widely scattered, and at present can be reached only over roads which have been badly located. They are very dusty and in many places dangerous, and as a whole the journey is tedious and disagreeable. The railway station is 7 miles from the hotel at the Mammoth Hot Springs. The distance from the Hot Springs to the first point of interest, the Norris Basin, is 32 miles; from the Norris Basin to the Middle Basin (Marshall's), 18 miles; from the Middle Basin to Fire Hole Basin, 6 miles; from Fire Hole Basin to the Upper Basin, 6 miles, being a total distance of 69 miles.

To reach the Great Falls it would be necessary to follow a horse trail near the northern shore of the Shoshone Lake, thence by the western shore of the Yellowstone Lake and down the banks of the Yellowstone River to the falls; but this journey, while it would develop many points of great interest, is but seldom taken. The usual course is to return from the Upper Basin to Marshall's, 12 miles, and from Marshall's to the Great Falls, 32 miles. From this point a horse trail leads to Mount Washburn and down the valleys of the Yellowstone and Gardiner Rivers to the Hot Springs; but this also is so difficult and fatiguing that few persons pursue it, and the great majority of visitors return to Marshall's, a distance of 32 miles, and to the Hot Springs, a distance of 50 miles, making a total circuit of 195 miles to reach the six great points of interest usually visited at present. Under the efficient direction of Lieutenant Kingman, at present in charge of the location and construction of roads, they are being very rapidly improved, but, even when completed, a visit to the Park by road conveyance would be extremely fatiguing and very expensive, so much so as to be practically prohibitory upon the aged, the infirm, and the poor.

After a very careful consideration of the subject I have become entirely satisfied that the Park cannot be developed and rendered at all easy of reasonable access without the construction of a railroad, which can be so located as to reach the main points of interest at a comparatively slight expense and with no more fatigue than attends ordinary railroad travel. I am the more confirmed in this opinion by the universal judgment of all the visitors with whom I conversed upon this subject, and they were very many, during my visit to the Park.

If a railroad is authorized, it ought not to be a monopoly of any one of the great parties in interest, and it is respectfully suggested that any charter granted for the construction of such a road should contain a provision by which the four parties in interest should be equally interested in its construction, namely, the Northern Pacific, the Union Pacific, the Central Pacific, and the National Park Improvement Company, each of whom should be authorized to subscribe, if they desire so to do, to the one-fourth of the stock. Such charter should also contain a provision by which the management of the road would be vested in

ten directors, two of whom should be appointed by the President to represent the Government, and two by each of the four companies named. There should also be a provision by which the charges for freight and passenger traffic should be subject to the supervision of the Secretary of the Interior, in like manner as the National Park Improvement Company.

In view of the probability that the rapidly developing mining interest at Clark's Fork, near the northeast corner of the Park, in Montana, will require railroad facilities within a very short period, and the most direct route for such road will be along the northern border of the Park, it is important that such company should be authorized to build a railroad connecting with that point. Such railroad would not in the least deface the Park, but on the contrary would add largely to its attractions and be the most efficient means to prevent the destruction of the beautiful groves of timber which now abound, and which, from the carelessness of tourists in neglecting to thoroughly extinguish their camp fires, are often consumed in enormous quantities, reaching probably hundreds of thousands of acres.

The construction of such road would be necessarily from private capital and without subsidy from the Government, and there would still be abundant necessity for the judicious expenditure of any appropriation which Congress would be disposed to grant in the construction of suitable roads from the railway stations to the numerous points of interest. The facilities of both railroad and carriage road will be required to render the Park a credit to the Government.

THE PERSONNEL OF THE BUREAU NOVEMBER 1, 1883.

The employés of this office, with their respective positions and salaries, on November 1, 1883, were as follows:

William H. Armstrong, Commissioner	$4,500
Frank B. Pickerill, bookkeeper	2,400
William M. Thompson, assistant bookkeeper	2,000
Thomas Hassard, engineer	2,500
Thomas J. Walker, clerk	1,600
Miss Kate Schmidt, copyist	900
Paul M. Johnstone, assistant messenger	720

The estimates which have been submitted for the fiscal year ending June 30, 1885, are as follows: Commissioner, $5,000; bookkeeper, $2,400; assistant bookkeeper, $2,000; railroad engineer, $2,500; one clerk, $1,600; one copyist, $1,000; one assistant messenger, $720; traveling expenses, $3,000; books and book-cases, $500; making in all, $18,720.

The duties of this office, representing as they do the supervision, inspection, and reporting upon of vast railroad properties, and the settlement of accounts involving millions of dollars annually, require the very best class of ability as to accounting, engineering and general railroad experience. It affords me great pleasure to commend the general efficiency of the employés of this office, who have made comprehensive inspection of properties and thorough examination of accounts, and who have so ably seconded my efforts in the preparation and completion of this report.

I have the honor to be, sir, very respectfully, your obedient servant,

WM. H. ARMSTRONG,
Commissioner.

Hon. H. M. TELLER,
Secretary of the Interior.

REPORT OF THE COMMISSIONER OF INDIAN AFFAIRS.

DEPARTMENT OF THE INTERIOR,
OFFICE OF INDIAN AFFAIRS,
Washington, October 10, 1883.

SIR: In the performance of a duty imposed on me by law, I have the honor to submit herewith my annual report for the year 1883.

In reviewing the operations of the last year it is gratifying to find that not only has no backward step been taken in the march of improvement among the Indian tribes, but some decided advance has been made. Particularly is this true in the matter of industrial school education. Some tribes have been persuaded to send their children to industrial schools that have heretofore successfully resisted all efforts to induce them to do so. Whatever of success has been attained in this matter is attributable largely to the increased appropriations which the last Congress wisely made for this purpose. Whatever differences of opinion may exist in reference to many questions of policy as applied to the Indian tribes, one question may now be considered as settled beyond controversy, and that is that the Indian must be taught to work for his own support, and to speak the English language, or he must give place to people who do. It is a grave mistake to suppose that in matters of detail and of minor importance the same rule will apply to all Indians, because some are as different from others as the people of different nationalities; but on the subject of labor and language, the rule is and must be uniform and universal; and it is encouraging to know that the Indians of 1883 are in advance of the Indians of 1882 in this respect. This subject is discussed more fully on page XXX.

In my report of one year ago I called attention to many of the difficulties with which this office has to contend in administering its affairs, and which it was hoped would be cured by legislation, some changes in law and practice being absolutely necessary if efficiency and economy were to be attained. But owing, I presume, to the press of business and the shortness of the session, the needed relief was not obtained; so that we are now dragging along in many of the old ruts of the past, some of which have become dangerously deep. But inasmuch as my duty is performed when I call attention to needed legislation and state the facts, and not until then, I must of necessity repeat in substance part at least of what was contained in my last report.

Among the things needed to secure success and efficiency in solving what is called the Indian problem are:

First. *An appropriation to survey the out-boundaries of Indian reservations*, so that both Indians and white men may know where they have rights and where they have none. This will save not only much trouble and expense, but also many lives of both white men and Indians. This subject is also treated more at length on page XVII of this report.

Second. *A law for the punishment of persons who furnish arms or ammunition to Indians.* No such law now exists.

Third. *More liberal appropriations for Indian police.* I have urged this before, and repeat it now, for a very little reflection will satisfy any one that the present pay is no just compensation for the services of a man and horse. Our Indian police are an absolute necessity, and have in almost every instance rendered very valuable service, and ought to have more encouragement and support. The pay of these police as now fixed by law is $5 per month for privates and $8 per month for officers, a compensation entirely inadequate to their proper support, especially as

many of them have families, which at non-ration agencies are not entitled to rations. As it is the duty of an agent to be careful in making his selections for the force, good men are secured only with the greatest difficulty. One agent, on this particular point, very appropriately remarks: "Should the pay be increased, the best men in the tribe could easily be enlisted as a road to distinction that formerly was the reward of prowess in battle or skill in hunting." I must, therefore, take this opportunity of repeating the recommendation made in my last annual report, "that commissioned officers be paid $15 per month, sergeants, $10 per month, and privates $8 per month." I am still, however, of the opinion given in that report, that "a much more satisfactory arrangement would be to invest the Commissioner of Indian Affairs with discretionary power as to pay of Indian police, the service at some agencies being of vastly more importance than at others." It is hoped that a liberal spirit of legislation will be manifested toward this very important matter in the next Congress.

Fourth. *An appropriation of money sufficient to defray the expense of detecting and prosecuting persons who furnish intoxicating liquor to Indians.* The reports of my predecessors for the last 30 years agree with singular unanimity in reference to the trouble among Indians growing out of the use of intoxicating liquors, and the fact has been established beyond controversy, that it has been productive of more disease, crime, and loss of life, than all other causes combined. The laws now in force on this subject are found in Sections 2087, 2139, 2140, and 2141, Revised Statutes, but experience has proven these laws to be insufficient to stop the traffic complained of. The public holds this office accountable for the maintenance of good order on Indian Reservations, and when laws are violated and life and property destroyed, the blame is unreasonably charged to a failure of the Bureau to enforce existing laws. From the best information I have been able to obtain, it seems that our neighbors in Canada manage this liquor question amongst their Indians better than we do.

The minister of the interior in one of his reports some time since uses this language:

> Two acts passed during the recent session of Parliament claim special notice in connection with Indian affairs, one of which "prohibits" the importation into or manufacture in the northwest territories of all intoxicating liquors, and enforces such prohibition by the most stringent provisions. The other authorizes the establishment of a mounted police with ample powers to carry out the provisions of the liquor law.

After making this statement, he proceeds to say:

> The united operation of these two acts has already done much towards the suppression of the liquor traffic. The liquor law and the mounted police have together succeeded in stamping out almost entirely the vice of drunkenness.

If this can be done in Canada it can be done here, but it cannot be done unless money is appropriated to pay the expense of enforcing the laws already on our statute books. I have repeatedly asked for this, and now ask again. An Indian, in speaking on this subject, said:

> We don't make whisky ourselves, and we tell our young men not to drink it, but we can't help it so long as white men sell it to them. We don't know how to make the white men take the whisky away, but the great men at Washington do. We hope they will help us.

And I now add my voice to that of the Indian and urge upon the "great men at Washington" to make it possible for this Bureau to detect and prosecute the wretches who violate law, and transform otherwise peaceable Indians into intensified savages by introducing fire-water among them.

Another aspect of the subject also demands attention. Most Indians will drink intoxicating liquor whenever and wherever they can get it. It will therefore be impossible to eradicate this evil so long as the law authorizes any Department of the Government, or any agent thereof, to introduce liquor on an Indian reservation on any pretense whatever. Section 2139, Revised Statutes, makes it a—

> Sufficient defense to any charge of introducing or attempting to introduce liquor into the Indian country, that the acts charged were done by order of or under authority from the War Department, or any officer duly authorized thereunto by the War Department.

And section 2140 provides that—

> It shall moreover be the duty of any person in the service of the United States, or of any Indian, to take and destroy any ardent spirits or wine found in the Indian country *except such as may be introduced there by the War Department.*

No one claims that liquors thus "introduced" are less pernicious in their effects than those obtained from any other source. These laws were passed when the Indians were under the control of the War Department, and there is certainly no reason why this extraordinary privilege should longer be retained. In my opinion no ardent spirits should be introduced into the Indian country under any pretense whatever, nor their sale permitted within twenty miles of an Indian reservation; but under existing laws on the subject, it is a notorious fact that ale, beer, and preparations of alcoholic stimulants, disguised as medicines, are sold at military posts to soldiers and civilians; and although the post traders are not permitted to sell it directly to the Indians, yet it is an easy matter for the Indians to obtain it from the soldiers and civilians to whom it is furnished.

By General Order No. 24, dated February 22, 1881, issued from the Headquarters of the Army, by order of the President, the sale of *intoxicating liquors* at military posts and stations was forbidden; but it is claimed that lager beer and other malt liquors are not considered "intoxicating liquors," and therefore are not prohibited in the aforesaid order. Hence post traders under the supervision of the War Department consider themselves authorized to buy and sell malt liquors in such quantities as may suit the demands of their trade. As an illustration of the working of this construction of the President's order, it has been stated that at one of the military posts, where the troops number less than than 200, 72,000 pints of lager beer were consumed in three weeks, which is about 17 pints per day for each man. I am also informed that most of the lager beer which is sold at these military posts is made expressly for that particular trade, and contains from 25 to 40 per cent. of proof spirits, instead of the 5 to 12 per cent. contained in the ordinary lager beer. I am therefore constrained to believe that until the right to dispose of liquor of any kind, under whatever name or subterfuge its sale or introduction on or near an Indian reservation may be attempted, is forbidden by law, its sad and demoralizing effects among the Indians will continue to exist.

Almost every mail brings complaints, from both whites and Indians, of wrongs and outrages committed by drunken Indians. The following extract from the letter of an Indian agent may serve as a sample of many others:

> SIR: I was much pleased to observe a report that you were determined to spare no effort to suppress the whisky trade among the Indians. Now, whether in this item of news there is any truth or not, one thing is certain, that no more potent obstacle exists, to the civilization of the Indian than the curse of intoxicating drinks. I have more to contend with in this direction than in all others. Under its baleful influence

the men are robbed of their land and hard earnings, the women are demoralized and rendered worse than brutes, and all are kept in the vilest of degradation, and much of the effort to lift by education and improvement these otherwise peaceful and law-abiding people from their normal condition of barbarism is frittered away through the heartless cupidity of the dealer in this poisonous stuff.

But bad as it is here, I think among the Indians of the far West and Northwest it is infinitely worse. I was recently informed by a gentleman who has been some time at Standing Rock Agency, that the influence of this poisonous stuff was fearful; and at all the military posts among the Indians, while the Indian trader was prohibited from selling liquors at any rate, the post trader at the military post in the immediate vicinity, made the sale of intoxicating beverages his principal business, and, for the population, the amount was simply enormous; that while he was there, a single steamboat landed for this man six car loads of beer and fifteen barrels of whisky; that while he was not allowed to sell to Indians he sold *ad libitum* to officers and soldiers, and the scenes of drunken debauchery in which not only soldiers and Indians mingled promiscuously, and not infrequently officers also, were too shameful to narrate, and the degradation to which these guardians of the nation's honor subjected the Indian women is too disgraceful to be named.

I also submit that the punishments imposed by existing statutes on this subject are not commensurate with the enormity of the crime committed. The law, as it now stands, makes the penalty for its violation *not more* than two years imprisonment, and *not more* than three hundred dollars fine. It should read *not less* than two years, and *not less* than three hundred dollars. I deem this change absolutely necessary, in view of the fact that some of the courts are extremely tender-hearted when sentence is to be pronounced on a wretch who furnishes liquor to Indians. In some cases, after an expenditure of much time and money, the guilty party has been fined one dollar, or imprisoned one day, and, as a consequence, the violator of the law laughs at the farce, and goes on with his nefarious business.

So much has been written in almost every report for the last thirty years, and so little attention has been given by Congress to the various recommendations for more stringent laws on this subject, that it would appear superfluous to bring the matter so constantly to your attention; but I am so clearly convinced that the suggestions made, if enacted into a law, would materially aid the Department in raising the Indians to a higher state of civilization, that I would be derelict to my duty if I failed to repeat and reaffirm my official observations and convictions in this regard. If my space would allow I could fill pages with the testimony of civil and military officers in support of what is here stated, and I earnestly hope that Congress will see the necessity of making such changes in the law as will make it possible to punish those who furnish intoxicating liquors to Indians.

APPROPRIATIONS.

Under the present system of making appropriations for the Indian service, and the rulings of the accounting officers of the Treasury in the settlement of accounts, this office is very much embarrassed, and large loss of funds is occasioned. Money that might be very advantageously used if the Department had any power to exercise its discretion in the matter, now goes back into the Treasury every year, to the amount of hundreds of thousands of dollars, because some change or circumstance occurs that could not possibly have been foreseen at the time the appropriation was made. If the appropriations were made more in bulk, or so as to allow the Department to use its discretion in their expenditure, so that any part of an appropriation not needed for the object or purpose for which it was made, or that could be spared therefrom, could be used for some other object or purpose in the Indian service, it would aid very materially the smooth and successful operations of this

office; provided always, however, that no treaty stipulations should in any manner be interfered with. No one, however well posted in the affairs of the Indian Office, can by any possibility know exactly what will be needed at every point for one year in advance, and as a matter of course members of Congress cannot be better posted in these matters than those whose business it is to watch every part of it for three hundred and sixty-five days in the year. If Congress will fix the amount to be expended for the Indian service, and leave the Department to distribute it as the wants of the service, seem to require, I am confident it would be a great improvement on the present manner of doing business. Under the present system some non-treaty tribes of Indians receive 3 pounds gross of beef per capita each day, and some 2 ounces per capita each day. If the plan I suggest were adopted, this disproportion could be remedied, while it cannot be remedied under the present system.

If the manner of making the appropriations for the Indian service be contrasted with that of the War Department, it will add strength to the suggestions which I have made. The appropriations for the War Department for the year 1883, amounting in round numbers to $25,000,000, were made under less than sixty different heads, leaving, very properly as I believe, a large discretion with the Secretary of War as to their disposal. The appropriation for the Indian service of about one-fourth that amount is cut up into about two hundred and sixty separate and distinct appropriations, each one of which must be used as specially provided, and for no other purpose, although it may happen that in one place there is an abundance, while in another want and famine may prevail. In other words, the whole War Department with all its bureaus has only about sixty different appropriations, while the Indian Bureau alone has its appropriations under two hundred and sixty different heads. I have thought it my duty to call attention to this in order that the much-needed change may be made in the manner of making appropriations for the Indian service.

INDIAN AGENTS.

The impression seems to prevail to a great extent that almost any man will do for an Indian agent, and as a consequence of this belief, men who are broken down physically, financially, or politically are frequently recommended for that position. The civilization and elevation of the Indians depends more upon the agents who have their immediate care and management than upon any and all other instrumentalities combined, and hence none but the best class of men should be selected for this service, and to them a fair compensation should be paid. I said in my last report, and say now, that—

> If the agent is an *honest, industrious,* and *intelligent Christian* man, with the physical ability and disposition to endure hardships and courageously encounter difficulties and disappointments, or, in other words, if he is morally, mentally, and physically above the average of what are considered good men, he will work wonders among these wards of the nation.

Sometimes such men are found who are willing to undertake this work for the good that they hope to accomplish, but they soon find themselves surrounded with difficulties and hampered and embarrassed by regulations and rulings that are not to be found in any other business or any other department of the Government; and in place of the support and sympathy which they expected from the Government, they are harassed and annoyed by technical rulings in conducting the affairs of the agency to such an extent that they become disheartened, despondent, and disgusted, and abandon the work upon which they

entered with high hopes of doing good. One agent, who was appointed upon the earnest solicitation of a United States Senator from his State, wrote me a few weeks since, after being in the service about one year, using this language:

> If I had known at the time of my appointment of the heavy responsibility, trouble, sleepless nights, and agony of mind I have had to undergo, $5,000 salary would not have tempted me to accept the office. I would now resign if I could in justice to myself and bondsmen.

Another of our agents, a live, wide-awake, energetic man, in tendering his resignation for the second time a few weeks since, uses the following language:

> I respectfully beg leave to renew the tender of my resignation. It is needless for me to add any reasons to the ones already given, but I will say this: I am thoroughly convinced after digesting all that was said to me by the chief of the Indian division of the Second Comptroller's Office, that no care, no honesty, will prevent a man in this position from being robbed by legal process, and further, that the Indian Bureau is powerless to protect its officers. I am satisfied that no agent can perform the higher duties for which he was placed here without sooner or later being compelled to spend his own money to defend himself from some unjust charge. I have the assurance of this same chief of division in the Second Comptroller's Office, that in case an agent acting on his own judgment did, by an expenditure of five dollars, save the Government a million, he would compel him to refund that five dollars if he could. I cannot afford, after doing my whole duty, to spend a thousand dollars, to prove it, and I don't propose to spend my money on claim agents, either.

The Indian service loses very many of its best agents because of the unnecessary and vexatious manner of keeping and settling their accounts. No mercantile or manufacturing business could be carried on one year on the same system. I am compelled to say that it is wrong in principle and in practice, and is in effect discounting good men and offering a premium on bad or incompetent ones.

In addition to this, many of the Indian agents have to live in houses which are in wretched condition, much less comfortable than stables for horses and mules in civilized communities. At least $100,000 should be appropriated this year for construction and repair of buildings at agencies.

CLAIMS OF INDIANS AGAINST THE GOVERNMENT.

The practice of approving contracts to collect from the Government money due the Indians is one that, in my judgment, ought not to exist. The Government claims to be the guardian of the Indians, and as such is clearly under obligation to guard their interests and protect them in their rights; but, under section 2103 of the Revised Statutes, it has for years been the practice to approve of contracts by which outside parties have taken from the Indians hundreds of thousands of dollars for service which ought not to have cost the Indians one cent. If the Government, acting as guardian, owes, or holds in trust for the Indians, money or property belonging to them, the clearest and plainest dictates of common sense and common honesty require that the ward should not be compelled to suffer loss to obtain what is justly due him. During the last four years agreements have been entered into between Indians and different attorneys by which these attorneys were to receive from the Indians $755,221.28 for collecting from the Government money said to be due the Indians. Now it is very certain that if money is due any tribe of Indians that fact can be ascertained by some officer of the Government who has access to all the treaties and the laws made in pursuance thereof as readily as by any other person, if not more readily, and I submit that it is the duty of the Government to see that the wards of

the nation receive, free of cost, what is justly due them, while it is equally the duty of the Government to see that no unjust claim is paid.

During the last session of Congress I had the honor to address a letter to you on this subject, which I believe met with your entire approval, in which I suggested that provision should be made by law for the appointment of an officer who should attend to all cases where money might be justly due from the Government to the Indians; that this should be his entire business; and that he should receive such a salary as would secure the services of a person with sufficient legal ability, integrity, and business capacity to see that no injustice is done either the Government or the Indians. It may be said that this is a departure from the rule that has governed the Department for many years, but I submit that that is no argument against it, unless it can be shown that age sanctifies error.

LAWS FOR THE GOVERNMENT OF INDIANS.

In the annual reports of this office for several years past, attention has been invited to the urgent necessity for the enactment of some suitable code of laws for Indian reservations. Indians in the Indian country are not punishable for crimes or offenses committed against the persons or property of each other. Such offenses are generally left to the penalties of tribal usage, involving personal vengeance or pecuniary satisfaction, or the offenders are subjected to a few weeks or months arbitrary confinement in an agency guardhouse or military fort. The Indian is not a citizen of the United States. He cannot sue or be sued under the judiciary act of 1789, and only gets into Federal courts as a civil litigant, in occasional instances, by favor of special law, and in many of the States and Territories he has no standing at all in court.

The evils resulting from this state of affairs are forcibly described by Bishop Hare in his annual report, dated September 11, 1877. He says:

> Civilization has loosened, in some places broken, the bonds which regulate and hold together Indian society in its wild state, and has failed to give the people law and officers of justice in their place. This evil still continues unabated. Women are brutally beaten and outraged; men are murdered in cold blood; the Indians who are friendly to schools and churches are intimidated and preyed upon by the evil-disposed; children are molested on their way to school, and schools are dispersed by bands of vagabonds; but there is no redress. This accursed condition of things is an outrage upon the One Lawgiver. It is a disgrace to our land. It should make every man who sits in the national halls of legislation blush. And, wish well to the Indians as we may, and do for them what we will, the efforts of civil agents, teachers, and missionaries are like the struggles of drowning men weighted with lead, as long as by the absence of law Indian society is left without a base.

No action has been taken by Congress on repeated recommendations from this office and numberless petitions from Government officials, institutions, religious societies, missionaries, and other philanthropists, asking for the enactment of a general statute putting Indians under the restraints and protection of law. It has occurred to me that, pending the long delay in the enactment of a general law on the subject, a considerable body of Indians might soon be brought within the jurisdiction of courts in another way. In Dakota and New Mexico are nearly 60,000 Indians. If, when those Territories become States, it shall be provided that the respective State courts shall have jurisdiction over Indian reservations within the boundaries of those States, the condition of the Indians residing therein will be vastly improved. And I would particularly recommend that hereafter, whenever a State is admitted into the Union, the act of admission shall contain a provision giving to Indians within its limits all the rights, privileges, and immunities en-

joyed by the citizens thereof, and subjecting them to like penalties, liabilities, restrictions, &c., except in cases specially otherwise provided for by treaty or act of Congress.

In my opinion, Congress should confer both civil and criminal jurisdiction on the several States and Territories over all Indian reservations within their respective limits, and make the person and property of the Indian amenable to the laws of the State or Territory in which he may reside (except in cases where such property is expressly exempted by treaty or act of Congress), and give him all the rights in the courts enjoyed by other persons.

As demonstrating the incongruity of existing statutes in relation to crimes committed by Indians, and the urgent necessity for a radical amendment thereof, I desire to invite special attention to an occurrence which has been brought prominently before this office during the current year. On the 18th September, 1882, Robert Poisal, a half-breed Arapaho belonging to the Cheyenne and Arapaho Reservation in the Indian Territory, while driving home with his niece, Mrs. Meagher, from the Sacred Heart Mission, in the Pottawatomie country in that Territory, whither they had been to place some of their children at school, was shot down and killed by Johnson Foster, a Creek Indian. This occurred at a point about 45 miles east of the agency, on the Shawneetown road, about 20 miles from Kickapoo Village, on the Pottawatomie Reservation, a tract of country specially set apart by act of Congress for the Pottawatomies and Shawnees. There was no apparent motive for the murder other than plunder. The murderer was arrested by the Seminole Light Horse and brought into the Cheyenne and Arapaho Agency, whence, in order to escape the summary vengeance threatened by the Arapahoes, he was turned over to the military authorities at Fort Reno for safe keeping.

The facts being reported to this Department, and an examination of the treaties with the Cheyenne and Arapaho Indians seemingly favoring the view that the United States court had jurisdiction of the crime committed, the honorable Attorney-General, upon the recommendation of the Department, instructed the United States attorney for the western district of Arkansas to arrange for the immediate removal of the prisoner to Fort Smith, and for his trial there before the United States court. Section 2145 of the Revised Statutes provides—

> Except as to crimes the punishment of which is expressly provided for in this title, the general laws of the United States as to the punishment of crimes committed in any place within the sole and exclusive jurisdiction of the United States, except the District of Columbia, shall extend to the Indian country.

Section 2146 enacts—

> The preceding section shall not be construed to extend to *crimes committed by one Indian against the person or property of another Indian, nor to* any Indian committing any offense in the Indian country who has been punished by the local law of the tribe, or to any case where by treaty stipulations the exclusive jurisdiction over such offenses is or may be secured to the Indian tribes respectively. (See "An act to correct errors and supply omissions in the Revised Statutes of the United States," approved February 18, 1875; 18 Stat., p. 316.)

The United States attorney for the western district of Arkansas, having expressed the opinion that under section 2146, above quoted, the United States court was without jurisdiction in the premises, and that the trial and punishment of the offender was a matter properly belonging to the Indians themselves, the honorable Attorney-General was inclined to think it would be a useless expense to transport the prisoner to Fort Smith, but invited a further expression of the views of this Department before issuing definite instructions to the district attorney.

On the 4th November last this office replied through the Department, and referred to the second clause of the treaties with the Cheyenne and Arapaho Indians (15 Stat., 593; *Id.*, 655), reading as follows—

> If bad men among the whites, or among other people subject to the authority of the United States, shall commit any wrong upon the person or property of the Indians, the United States will, upon proof made to the agent and forwarded to the Commissioner of Indian Affairs at Washington city, proceed at once to cause the offender to be arrested and punished according to the laws of the United States, and also reimburse the injured person for the loss sustained.

and took the position that the murder having been committed within the Pottawatomie country, the prisoner came within the meaning of the term "other people subject to the authority of the United States," and was excepted from the general law as expressed in section 2146, and therefore that the United States court could take jurisdiction of the case; citing the case of Crow Dog, a Sioux Indian recently tried and convicted by the United States court in Dakota, for the murder of Spotted Tail, an Indian of the same tribe. On the 7th November last the honorable Attorney-General replied to the effect that, while admitting there was some ground for the argument, he considered the question of jurisdiction by the United States court over the case as so doubtful as to render it inexpedient to incur the expense of the prisoner's removal and trial at Fort Smith.

The military authorities at Fort Reno, having applied through the War Department to be relieved of the custody of the prisoner, this office, in view of the opinion of the Attorney-General, by letter of the 11th June last, inquired of the Department what disposition should be made of the prisoner. Attention was called to the fact that the courts of the Creek Nation, to which nation the prisoner belonged, were without jurisdiction, the murder having been committed outside the limits of their country; that the Absentee Shawnees and Pottawatomies, within whose boundaries the crime was committed, had no laws applicable to the case, and that neither the Cheyennes and Arapahoes nor the Absentee Shawnees and Pottawatomies were parties to the reciprocity compact entered into between the Cherokee, Muscogee, Seminole, Osage and other nations, on the 4th June, 1870 (see Laws of Muscogee, or Creek Nation, edition 1880, p. 85); and it was suggested that in view of the many complications attendant on the case the Attorney-General be requested to reconsider his decision, to the end that the question of jurisdiction might be passed upon by the United States court, or that the Department be pleased to indicate what action should be taken upon the request of the War Department, in order that full justice might be done all parties concerned. Said letter having been duly referred to the Department of Justice, the honorable Attorney-General on the 27th June last replied at considerable length, setting forth his views on the legal aspect of the case and adhering to his opinion already expressed that there was but little ground to hope that the United States court had jurisdiction of the offense. Recognizing, however, the embarrassments prevailing, he stated that if it occurred to the Department as a matter of importance that the opinion of the courts should be taken in the course of a vigorous prosecution of the crime he would cheerfully execute whatever suggestion might be made, adding that such prosecution, whatever its issue, might more effectually call the attention of Congress to the general subject, which indeed seemed to require further legislative consideration. Thereupon the Department, upon the recommendation of this office, availed itself of the Attorney-General's suggestion, and, under date of the 24th July last, requested that the United States attorney for the district of Kansas be directed to take the necessary steps for the

trial of the prisoner before the United States district court at Wichita, Kans., to which, by act of Congress of January 6, 1883, is committed jurisdiction over all that part of the Indian Territory lying north of the Canadian River and east of Texas and the one hundredth meridian, not set apart and occupied by the Cherokee, Creek, and Seminole tribes (22 Stat., 400).

In the mean time the prisoner, Johnson Foster, had been removed from the guard-house at Fort Reno by a United States deputy marshal *en route* to Fort Smith, Arkansas, there to be tried for horse-stealing and other minor offenses previously pending against him. The deputy secured a strong guard of troops to assist in escorting the prisoner beyond the limits of the agency, notwithstanding which a small party of young Arapahoes made a bold dash when about 15 miles out from the agency, and came very near getting their man, but finally abandoned the attempt. I am since officially informed by the agent that while on the road to Fort Smith and near the Osage Agency, Foster succeeded in brutally murdering McWeir, the marshal's assistant, and in making his escape. At last accounts he was at large.

Of course, in the event of his recapture, having now murdered a white man, there can be no failure of justice for want of jurisdiction in the United States court, but I have purposely referred to this case in detail as a glaring instance of the injustice of a law which, by remitting the trial and punishment of a murderer of one of their own race to the Indians themselves, recognizes the forfeiture of a few ponies or other property to the murdered man's relatives as a sufficient atonement for the crime. I do not undertake to say that the position contended for by this office in the Johnson case would have been wholly tenable before the United States court. In that respect I am bound to defer to the opinion of the honorable Attorney-General, although he admitted that the question was one by no means free from doubt; but I do venture to maintain that this case pre-eminently shows that it is high time that crimes among Indians should be defined by United States laws, and the Department be relieved from all possible chance of future embarrassment by reason of the exception contained in the statute referred to. What is required is a law for the punishment of crimes and offenses among the Indians themselves, one which shall make the Indian equally secure with the white man in his individual rights of person and property, and equally amenable for any violation of the rights of others.

COURT OF INDIAN OFFENSES.

On the 10th of April last you gave your official approval to certain rules governing the "court of Indian offenses," prepared in this office in accordance with instructions contained in your letter of December 2 last. These rules prohibit the sun-dance, scalp-dance and war-dance, polygamy, theft, &c., and provide for the organization at each agency of a tribunal composed of Indians empowered to try all cases of infraction of the rules. Printed copies of the rules have been sent to the various United States Indian agencies (except the agency for the five civilized tribes), with instructions to agents to nominate the judges provided for therein. Many of the agents have as yet been unable to organize the court; some asking for further time, others reporting their inability to secure the services of proper men to fill the positions, the larger proportion, however, assigning as a reason for the delay that their Indians positively refuse to accept a position as judge unless their services in that capacity are paid for by the Government. If this latter ob-

jection were removed, and an appropriation made for the payment of a stated salary for the judges, say $20 per month, I am of the opinion that the "court of Indian offenses," with some few modifications, could be placed in successful operation at the various agencies, and thereby many of the barbarous customs now existing among the Indians would be entirely abolished.

There is no good reason why an Indian should be permitted to indulge in practices which are alike repugnant to common decency and morality; and the preservation of good order on the reservations demands that some active measures should be taken to discourage and, if possible, put a stop to the demoralizing influence of heathenish rites. With this end in view the several courts are to be organized; but if it is desired to carry this plan into successful operation, it is absolutely necessary that some arrangement be made to pay a reasonable compensation to those who are to be called upon to preside as judges. I therefore recommend that the matter be submitted to Congress, asking an appropriation of $50,000 to be used in paying the salaries of the judges, at the rate of $20 each per month, the surplus to be used in paying other expenses incident to the organization of the court and the employment of such officers as may be found necessary to carry out and execute the various orders and decrees of the court.

In my opinion the appropriation for this purpose would be in the line of economy, in that it would avoid much of the expense heretofore incurred by the Government in its efforts to suppress offenses which now come under the rules referred to.

ALLOTMENT OF LANDS IN SEVERALTY, AND PATENTS.

During the year fifty-one certificates of allotments have been issued to the Pawnees, under the provisions of the fifth section of the act of April 10, 1876 (19 Stat., 30), and nineteen to the Chippewas of the Mississippi, on the White Earth Reservation, under the provisions of the seventh article of the treaty of March 10, 1867 (16 Stat., 721). Patents have been issued as follows: To the Chippewas of Lake Superior and the Mississippi, under the provisions of the third article of the treaty of September 30, 1854 (10 Stat., 1110), on the La Pointe or Bad River Reservation, thirty-four, and on the Lac Court d'Oreilles Reservation, eighteen; to the Winnebagoes, under the fourth section of the act of February 21, 1863 (12 Stat., 658), four; to the Kickapoos, under the provisions of the third article of the treaty of June 28, 1862 (13 Stat., 624), eleven; and to the Sisseton and Wahpeton bands of Sioux, under the fifth article of the treaty of February 19, 1867 (15 Stat., 505), nine; making the total number of certificates and patents issued one hundred and forty-six. Fifty Santee Sioux have made homestead entries under the concluding paragraph of the sixth article of the treaty with the Sioux Indians, concluded April 29, 1868 (15 Stat., 635). Allotments have also been made by the agents on the Nisqually, Squaxin, Bad River, and Lac Court d'Oreilles Reservations, the schedules of which have been returned for correction.

As to the utility and desirability of allotting lands in severalty to the Indians and giving them valid titles thereto, I can only reiterate what has been said in my preceding reports. In no case where allotments have been made and the titles secured, with proper restrictions, have any other than the best results followed. I shall, therefore, adhere to the policy of allotting lands wherever the same can legally be done and the condition of the Indians is such as to warrant it.

One of the principal obstacles in the way of making allotments, is the fact that there are no appropriations available for the survey of Indian reservations. In many cases allotments are authorized by treaty on reservations which have never been surveyed, and in other cases on reservations where the lines and monuments of the survey have become obliterated. In the latter cases I have, where practicable, authorized the employment of surveyors to re-run and re-mark the lines, paying for the work out of the appropriations for employés. Your attention is called to the importance of this matter in another portion of this report.

The agent at the Fort Berthold Agency reports that the Indians under his charge are anxious to take allotments, and that it would be greatly to their advantage to do so. There being no law nor treaty authorizing allotments to these Indians, it is my intention to prepare and submit for transmission to Congress at its next session, subject to your approval, a bill granting such authority.

At the last session of Congress a bill was submitted increasing the allotments to the Nez Percés in Idaho, and the Willamette Indians on the Grande Ronde Reservation, from twenty acres as provided for in the treaty with the Nez Percés, and from the graduated quantity provided for in the treaty with the Willamette Indians, to one hundred and sixty acres for each Indian entitled to an allotment under the treaties. No action was taken by Congress. As the quantity of land in each of these reservations is more than sufficient to give the amount recommended, and the Indians are desirous of having the quantity increased, the bill will be again submitted to you for transmission to Congress at its next session.

INDIAN HOMESTEAD ENTRIES.

I again, and for the third time, invite attention to the necessity of legislation by Congress to enable Indians to enter lands under the fifteenth and sixteenth sections of the act of March 3, 1875, extending to Indians the benefits of the homestead act of May 20, 1862, without the payment of the fees and commissions now prescribed by law, or to the necessity of placing a fund at the disposal of the Department, which can be used for such payments. I have again submitted an estimate for the sum of $5,000, and, as stated in my last Annual Report, I trust that Congress will either amend the law so as to allow Indians to enter homesteads without cost to them, or make appropriation of the sum estimated.

SURVEYS OF INDIAN RESERVATIONS.

It would seem that the experience of the last few years had demonstrated the utter futility of endeavoring to procure adequate appropriations for the survey of Indian reservations. Year after year proper estimates are prepared and submitted to Congress with the most urgent recommendations. Last year $100,000 was asked for and but $5,000 was appropriated. For the present fiscal year $100,000 was estimated for and not a dollar was appropriated; and there has not been an appropriation of any consequence made for the survey of Indian reservations during the past ten years. There are thousands of miles of reservation boundaries that have never been defined and marked by official survey, and the wonder is that the conflicts between the Indians and settlers are not more frequent than they are, when it is considered that in very many instances it is found absolutely impossible to determine which party is in the right. The settlers, surrounding the Indians on all sides, are anxious to procure good land upon which to settle, while the Indians themselves are watchful and naturally jealous of their rights.

There is no guide in the matter. The settlers, miners, or herders, as the case may be, approaching from all directions, and gradually circumscribing the Indians to the vicinity of their agencies, are finally confronted by the Indians or their agent with the warning that they are encroaching upon the reservation. This, in all likelihood, is disputed, and in the absence of proper marks indicating the boundaries of the reservation the dispute continues, engendering the bitterest feeling which too often ends in unfortunate strife. When it is understood that all surveys of Indian reservations, by express stipulation of law, are executed under the direction and control of the General Land Office (see 2115, Rev. Stats.) with the same safeguards against fraud that are employed in the survey of the public lands, it is difficult to see why appropriations for these much needed surveys are so persistently withheld. They are as much needed to determine the rights of settlers as to protect the interests of the Indians.

In the fulfillment of treaty stipulations and in carrying out the general policy of the Government in settling the Indians on individual allotments, it is necessary that arable lands within certain reservations be subdivided, and it is important in some cases that this be done at once; yet there is not a dollar available for this special purpose, although it was intended that a considerable portion of the $100,000 estimated for should be used in that way.

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INTRUDERS ON INDIAN LANDS.

As stated in the previous reports, an amendment to the law in reference to intruders so as to punish by imprisonment as well as fine is absolutely necessary. An intruder without property has very little fear of a fine. Some intruders have already been removed several times by the Indian police or the military, and as often have returned. The present law, imposing a fine *only*, has no terrors for this class of men. All that can at present be done is to remove the intruder, and if he reappears to bring a civil suit against him in the nature of an action of debt to recover the statutory penalty of $1,000. I have yet to hear of a single instance in which the penalty has been recovered. The result is expense to the Government for no purpose. Notwithstanding his repeated expulsion from the Indian Territory, Payne and his party of "Oklahoma colonists" have twice during the present year made attempts at settlement in that country, requiring the aid of the military, at great expense to the Government, to effect their removal.

In addition to the urgent recommendations which have repeatedly been made by this office and the Department on the subject, the Secretary of War deemed this frequent furnishing of troops for the removal of trespassers, at great expense to the Government, without any practical results, as a matter of such serious importance in the interests of the military service and of public economy that on the 2d February last he addressed a special communication to the President urging the amendment of section 2148, Revised Statutes, by providing a term of imprisonment for unlawfully entering upon Indian lands. This communication was transmitted by the President to Congress on the 5th February last, and on the 3d of the same month Mr. Dawes introduced in the Senate a bill (S. 2450), some time previously prepared in this office,* reading as follows:

Be it enacted by the Senate and House of Representatives of the United States of America

* See House Ex. Doc. No. 145, Forty-seventh Congress, first session.

in Congress assembled, That section twenty-one hundred and forty-eight of the Revised Statutes of the United States be amended to read as follows, namely:

"Every person who without authority of law enters and shall be found upon any Indian lands, tribal reservation, or lands specially set apart for Indian purposes, shall for the first offense, upon conviction thereof, pay a fine of not more than five hundred dollars, and be imprisoned at hard labor for not more than one year; and for every subsequent offense, shall, upon conviction thereof, pay a fine of not more than one thousand dollars, and not less than five hundred dollars, and be imprisoned at hard labor for not more than two years, nor less than one year; and the wagons, teams and outfit of such person or persons so offending shall be seized and delivered to the proper United States officer, and be proceeded against by libel in the proper court and forfeited, one-half to the informer and the other half to the United States, and in all cases arising under this act, Indians shall be competent witnesses: *Provided, however*, That the provisions of this section shall not apply to emigrants or travelers peaceably passing through such Indian lands, tribal reservations, or lands especially set apart for Indian purposes, without committing any willful trespass or injury to person or property."

On the 10th February last the bill as read and referred was reported back by the Senate Committee on Indian Affairs without amendment, but Congress again adjourned without taking action in the matter.

While on this subject I desire to say a few words in regard to the repeated attempts which have been made by United States citizens during the past four years to unlawfully appropriate certain lands of the Indian Territory reserved under treaty by the Government for Indian purposes, under the pretext that such lands are open to the public for settlement. Full accounts of these raids and of the measures taken by the Government to expel the intruders will be found in the successive annual reports of this office for the years 1879, 1880, 1881, and 1882. During the period referred to, D. L. Payne, the recognized leader of the movement, has been repeatedly arrested only to be released by the military authorities on the Kansas border, or held to answer to a civil suit in the United States court at Fort Smith to recover the penalty imposed by the statute, a suit invariably terminating without any practical result. With each repetition the movement appears to acquire additional strength. From official reports made to the War Department and on file in this office, I learn that in the expedition which left Arkansas City for the Oklahoma lands on the 1st February last there were about 250 persons, principally from Kansas and Missouri, including some 20 women and children, with from 80 to 100 wagons filled with provisions and forage sufficient to last them 30 or 40 days, and with tents, furniture, agricultural implements, &c. They appeared in the main to be a well-to-do, quiet set of farmers, and a different class of people from those who had been engaged in previous similar enterprises, but they were all well armed, mostly with Winchester rifles and carbines, and among them it was reported there was one man from Wichita, Kans., who had with him a full wagon-load of whisky and cigars, intending to open a saloon on arriving at their destination.

Besides this party, there were other and smaller outfits which were discovered and heard of *en route* from Caldwell and Coffeyville, Kans., to join the main body. Those from Caldwell are stated to have been with one or two exceptions persons without visible means of support, whom the citizens, though deprecating the movement, were glad to get rid of at any price.

Payne with his secretary, one W. H. Osburn, traveled with the Arkansas City party, and at a meeting held there the night before starting he is said to have roundly abused the Government and the Army. From the same official sources I learn that every member who joins the Oklahoma colony pays $2.50 for a certificate of membership

therein, of which 50 cents are retained by the secretary and the remainder goes into Payne's pockets. The form of certificate is as follows:

[Capt. D. L. Payne, president; Hon. J. M. Steele, treasurer; W. H. Osburn, secretary.]

Certificate of membership.

OFFICE OF PAYNE'S OKLAHOMA COLONY,
Wichita, Kans., ——— —, 188—.

This certifies that ——— ———, having paid the fee of two dollars, is a member of Payne's Oklahoma Colony, is entitled to all the benefits and protection of said colony and an equal voice in all matters pertaining to and the formation of its local government.

In testimony whereof the official signatures of the president and secretary are hereto subscribed, and the seal of the colony attached.

——— ———,
President.

——— ———,
Secretary.

I also learn that Payne issues "land certificates" to persons who do not desire to go down themselves by which he guarantees them 160 acres of land in the "Oklahoma Colony" in consideration of $25, which it is also stated he appropriates to his own use. I have no copy of this last mentioned certificate; but, even if there are no other controlling influences at work, it is manifestly a profitable speculation for Payne himself, who is not likely to desist from starting these expeditions so long as he can find persons credulous enough to part with their money on such worthless assurances, or so long as the law in relation to trespassers on Indian lands remains in its present unsatisfactory condition.

From a letter dated June 26 last, addressed to the Department by the honorable Secretary of War, I am advised that Payne has now applied to the United States circuit court at Topeka, Kans., for an injunction restraining military interference with his entrance into and occupation of the Oklahoma district of the Indian Territory, thus bringing up for judicial decision the whole question affecting the status of said district; and that the matter has been referred by the War Department to the Attorney-General to take such measures as may be deemed necessary to protect the interests of the United States in the premises.

I respectfully recommend that the attention of Congress be specially drawn to these aggressive movements on the Indian Territory lands, as illustrating the urgent necessity for speedy and effective legislation in regard to trespassers.

TIMBER DEPREDATIONS ON INDIAN LANDS.

Notwithstanding the repeated recommendations made by this office for legislation to protect the timber on Indian lands, no definite action has been taken by Congress, and depredations upon valuable timber, especially in the Indian Territory, are of constant occurrence. At the first session of the Forty-seventh Congress a bill (S. 1646), prepared in this office, extending to Indian lands the provisions of section 5388 of the Revised Statutes of the United States for the protection and preservation of timber, passed the Senate with a slight amendment, but failed to receive action in the House, either at that or the concluding session. The urgent necessity for this measure is shown in the correspondence set out in the report of the Senate committee,* to which I beg to refer.

CASH PAYMENTS TO INDIANS.

During the year there has been paid to Indians, in cash, as annuity or otherwise, in round numbers, $745,000. Of this amount $305,000

* Report No. 392, Forty-seventh Congress, first session.

was used to reimburse the Creek orphan fund, as provided for in the act approved August 7, 1882; about $220,000 was interest on indebtedness to Indians, funded and otherwise; about $13,000 finished the payment of the principal sum due to the Eastern Miamis, and nearly $10,000 was paid for damages to the property of Indians, the result of their removal, or the prosecution of public works to the injury of their reservations, &c., thus leaving something less than $200,000 of annuity payments proper, many of which will expire in the near future by limitation in the various treaties, &c.

Creek orphans.—The provisions of the act above noted, requiring the sum of $305,021.58 to be paid to the Creeks who were orphans on the 24th day of March, 1832, or to their heirs, to reimburse the fund due to them under treaty of that date, from which fund this money had been diverted by the Government, made it the duty of the Department to ascertain who were entitled to this payment, and to see that the money was paid to the actual beneficiaries under the law. The agent who was to make the payment was therefore instructed to carefully revise and correct the census list of these Indians, and before enrolling their names to closely examine and verify the claims of all who presented themselves. These instructions he carried out in a very satisfactory manner, submitting a census list showing 27 of the original 573 orphans still living, and nearly 800 heirs, many being descendants of the third generation. This list was certified to as correct by all the chiefs, thirty-nine in number, and by the agent, and, after being carefully examined and compared with the original rolls, was approved by the Department on the 28th December, 1882, and the payment made during the following March. As no evidences of dissatisfaction therewith have reached me from the Creeks, I believe that none exists.

Eastern Miamis.—In my last report I stated that the payment of the principal sum due to the Eastern Miamis July 1, 1880, was necessarily delayed until nearly two years had elapsed, but that interest had been paid for one year after it became due, viz, for 1881. A short time ago, in compliance with my recommendation, the Department authorized the payment of all the balance of interest still due and provided for, which was accordingly computed on each share of this principal sum up to and inclusive of the various dates on which the payments were made during the year 1882. In the cases of several who were not paid until after the expiration of that fiscal year a full year's interest was allowed. These payments altogether amounted to $6,367.01, leaving to be covered back into the Treasury $4,695.88 of the $11,062.89 interest provided for the year 1882. Thus, with the exception of one share of the principal sum still unpaid, the owner not having been found, a final settlement of this indebtedness will be made.

Sac and Fox in Iowa.—Several of the Sac and Fox Indians in Iowa still refuse to receipt for their shares of their annuity, which shares are set aside for them and will remain on the books of this office to their credit for the present.

Since my last report $10,000 more has been paid to these Indians on account of their back and current annuities, and at their request the Department authorized $10,000 more to be expended in the purchase of land for them. About $9,300 was thus expended, leaving about $700, which it was found could not be so used to advantage. With this balance they wish their chiefs and head men to pay some tribal indebtedness, and the Department has approved of its being given to them for that purpose. They will thus have received $60,000 of annuity since

January, 1882, and, with the exception of about $4,800, all that is so due to them up to the end of the fiscal year 1883.

Winnebagoes in Wisconsin.—Twenty-five hundred dollars were appropriated by the last Congress, as suggested in my last report, for the purpose of completing the census of the Winnebago Indians in Wisconsin, as required by the act of January 18, 1881, and an agent was appointed in April last by the Department for this duty, in which he has since been continuously engaged. These Indians are very much scattered over the State, and in most cases families have had to be personally visited wherever located. This and the careful examination into the rights of all claiming to be enrolled, and of the records of the Land Office as to homesteads said to be taken up by them in compliance with the above-mentioned act, and in assisting those who had not located homesteads to do so, has consumed much time and necessarily delayed the work; but it is now nearing completion.

From the reports I have received in reference to the present habits and condition of a great majority of these Indians, and the well-known character of many of the whites who surround them, I am convinced that to pay into their hands any considerable part of the money referred to in the act of January 18, 1881, would just so far frustrate the main object of the act; for, notwithstanding any promises they may make I am persuaded they will not use it to enter the land they have selected nor to improve it, nor for any good purpose, nor will their wants be in any sense permanently relieved thereby. Section 2 of the act above referred to reads that the Department, on completion of the census, is authorized to "expend for their benefit" certain sums therein stated and, farther on, the same section also reads that "all of said sums [meaning those just above noted] shall be *paid pro rata* to those persons whose names appear upon the census roll," &c. I have therefore decided to make this payment in three installments, the second payment not to be made until it is demonstrated that the first has been judiciously expended, as contemplated in the act.

A question which should be considered in connection with annuity payments is the ruling of the Treasury Department, based on section 3651 of the Revised Statutes, which ruling is to the effect that Indian agents are prohibited from procuring the necessary currency and small change required in making almost all annuity payments by paying a reasonable exchange to some banking institution nearer to the agency than the authorized United States depository where the funds may be placed to the agent's credit. This often necessitates a long journey by the agent, accompanied by an escort, an unnecessary expense, risk, and delay, and requires the agent's absence from the agency, where his presence is always needed. Although the letter of the law may call for this ruling, I do not believe the act was intended by Congress to so apply, nor, in my opinion, is such application for the best interests of the service.

PURCHASE, INSPECTION, AND SHIPMENT OF GOODS AND SUPPLIES.

Bids for furnishing goods and supplies for the Indian service were opened in New York on the 23d of April last. Three hundred and fifty-two bids were received at the opening in New York, and at the opening at San Francisco, on the 18th of July, twenty-four bids were received, making a total of three hundred and seventy-six sealed bids for supplying articles for the Indian service. One hundred and eighty-one contracts were awarded, and were made out in quadruplicate, and each

one accompanied with a bond. The awards in New York were made by me with the assistance of the Board of Indian Commissioners and Mr. G. M. Lockwood, chief clerk of the Department, representing the Department, after the samples offered with the bids had been examined by inspectors appointed for that purpose. The number of articles required to supply the Indian service are nearly 1,500, and are divided, exclusive of subsistence stores, such as beef, flour, sugar, coffee, &c., and exclusive of medicines and school-books, into fifteen classes, as follows: 1st, blankets; 2d, woolen goods; 3d, cotton goods; 4th, clothing; 5th, boots and shoes; 6th, hats and caps; 7th, notions; 8th, groceries; 9th, crockery and lamps; 10th, furniture and wooden ware; 11th, saddles, harness, &c.; 12th, agricultural implements; 13th, wagons and wagon fixtures; 14th, glass, oils, and paints; 15th, hardware.

The delivery, inspection, and shipment of most of the articles is performed in New York, in a warehouse rented for that purpose. The manner of receiving, inspecting, and shipping these goods has been repeatedly detailed in my reports. From May 23 last to the 15th of September there were received and shipped from the New York warehouse 22,718 packages, weighing from one ounce to 500 pounds, the total weight of these packages being 3,428,638 pounds. All have been accounted for. The invoices received and permanently recorded as to name, number, marks, articles, dates of receipt, inspection and shipment, routes by which goods were transported, and names of transportation contractors in each instance, were 3,703 sets of four each; three of each set are ansmitted from the warehouse to this office for settlement, and one to the respective agencies. These are in addition to invoices covering a large number of shipments from Chicago, Saint Louis, and other western points, for which the papers are forwarded to the New York office, carefully examined, and in many instances returned for correction before being transmitted to this office for payment. The number of western shipments for which invoices had been received up to September 15 is 500, but many are yet to be received, the delay being doubtless owing to the amount of clerical work necessary to be done by the inspectors in the West in filling out and signing receipts after shipment. A detailed record of each shipping receipt is also kept, which shows the marks, numbers, kinds of packages, character of contents and weight of each package; these receipts are made in duplicate for shipment and then copied in a special book for that purpose. The number of receipts so recorded, each having been written three times, is 1,260. This enables the office to trace any package, and in event of shortage of contents on arrival at the agencies, to locate and determine (upon receipt of a report from the Indian agent as to the weight of the package when received by him) the liability for deficiency, whether it rests with the contractor who furnishes the goods or with the transporter. Nearly 800 requisition sheets have been issued in ordering goods from contractors, besides the orders for medical supplies, of which there were 90; these requisitions contain full directions for shipment, and a schedule of the requirements of each agency, involving the placing of about 125,000 sets of figures in as many different squares. From April 24 last to September 15, 731 letters were received at the warehouse in New York, and 1,175 pages of letters written in answer.

The goods delivered under contracts have been fully up to sample, and with the exception of two instances where the provisions of Article V of the contracts were enforced, were satisfactory in every respect; in accepting the goods in the above instances under Article V of the contracts, the interests of the Government were wholly protected and full

value received. The inspectors have all promptly responded when called upon and have performed their duties in a satisfactory manner.

In connection with the purchase and shipment of supplies as above reported, I deem it my duty to again call the attention of Congress, through the Department, to the importance that contracts for goods and supplies for the Indian service be let very early in the spring, and to the consequent necessity that the appropriation bill be passed at an early day, if possible not later than the end of February. No schedule of supplies required can be prepared until the amount of money Congress appropriates is ascertained. After the schedules are made it requires from three to four weeks to have them printed, and under the law the advertisements calling for bids must be published not less than three weeks. In this manner two months are required after the Indian appropriation bill has become a law before bids can be opened, and with the large number of articles required and the number of contracts generally awarded on the bids received, it requires from five to six weeks to have the contracts and bonds executed, the orders for shipment issued, and all the complicated machinery by and through which the Government conducts its business set in motion. Should the Indian appropriation bill be passed and become a law not later than the end of February, no goods could be shipped, under the most favorable circumstances, until the end of June, and as a large proportion of the goods are for agencies on the Missouri River and have to be shipped before the close of navigation, which occurs about October 1, the necessity for the early passage of the bill becomes apparent.

In connection with this subject of purchasing supplies for Indians, I wish to place upon record the fact that I find, from an examination of the records kept by the War Department in the early history of our Indian affairs, that it was the custom for the Government to furnish to the Indians "scalping knives" by the thousands. To-day we furnish nothing of the kind, but in lieu thereof we furnish schools and such agricultural and mechanical tools and implements as belong to civilization and the peaceable pursuits of life. Thus we are substantially changing their "swords into plowshares and their spears into pruning hooks," and educating them to "learn war no more."

EDUCATION.

The increase in the accommodations for Indian pupils which the school appropriations for the last fiscal year made possible, has been followed by a corresponding increase in the attendance of pupils. Exclusive of the five civilized tribes the number enrolled at boarding-schools during the year just closed is 5,139, an increase of 650 over last year. The attendance on the day-schools has been 5,102, an increase of 836 over the preceding year.

Of the 5,139 boarding-pupils, 4,376 have attended schools on reservations or in their immediate vicinity, 641 have been enrolled at Hampton, Carlisle, and Forest Grove, and 122 have been placed in various schools in the States.

Reservation schools.—The boarding and day schools on reservations have made a creditable record during the year. Nine new boarding-schools have been opened, making the whole number now in operation, exclusive of the three training-schools, 79. The new schools for the Blackfeet in Montana, Pah-Utes in Nevada, Warm Springs, and Umatilla Indians in Oregon, and the Shoshones in Wyoming, gave boarding-schools for the first time to 9,000 Indians. Those schools can accommodate, however, but 169 pupils and will soon need enlarging. The

Devil's Lake Sioux and Klamaths have each been given a second school, and the Poncas have seen the long-delayed fulfilment of the promise that a boarding-school should be given them in the Indian Territory. Industrial training, mainly in farming and gardening, forms a part of the curriculum of agency boarding-schools. The schools have cultivated 1,526 acres, and raised 18,334 bushels corn, 4,952 bushels oats, and 19,340 bushels vegetables; made 1,171 tons of hay and 4,325 pounds of butter. But, as I said in my last report, industrial training, especially in workshops, needs more attention, and a much larger outlay of money for tools and materials and instruction. What Captain Pratt says in regard to the Carlisle pupils would apply to all reservation schools:

I think it very desirable that we should have experimental shops for the boys not learning trades, where, under the care of a teacher, even the youngest pupils might have some kind of manual training daily. I do not doubt that the gain in health, energy, and clear-headedness would make any expenditure in this direction an ultimate economy. We invariably find that when an idle or mischievous boy is put to work at a trade, his standing is raised in scholarship as well as conduct. In some cases the improvement has been very remarkable; in not one has it failed of good results.

An interesting event in the year has been the educational inroad in the Ute tribe. The wild Southern Utes allowed twenty-seven of their youth to be taken to the Albuquerque boarding school, although not one of the tribe had ever before attended any school of any description. At first the necessary routine and restraint of the school was irksome, and the labor required was repugnant; but within a few months Agent Sanchez reported:

On his arrival, one boy who aspired to the leadership of his fellows and who thought he should have fifty cents for bringing a pail of water and refused to perform any labor without pay, has been kindly and gradually led to change his views and has become a ready, willing worker, being especially interested in the industry of gardening. On being asked whether he had any word to send to his people, he soon replied: "Yes, tell them to make a garden; I think a garden is a good thing."

It was not without repeated assurances that the other branches of the Ute tribe could be made to believe that their relatives had gone so far over to the side of civilization.

Twenty-three new day schools are reported, most of them on reservations already provided with boarding schools. They are practically district schools located among settlements of Indians more or less remote from the agency, and needing the influence in their midst of some employé who can supervise their farming, house-building, and other practical interests, as well as teach their children. A few day schools have been discontinued and five have become boarding schools. There are now 117 in operation. The value of the day school is measured less by the actual advancement of its pupils in books, than by the influence of the teacher over them and their families, and by its importance as a recruiting station for candidates for boarding schools both on and off the reservation; children who cannot be induced to go away from home to a boarding school will stray into a day school which is close at hand; and afterwards, when their minds are awakened, will gladly accept the better opportunities offered them. Irregularity of attendance is a sore discouragement to the teacher; but this can be largely overcome by the attraction of a lunch served the pupils daily and prepared with their assistance.

The organizing of a system of day schools is meeting with favor among experienced agents who have large agencies, and desire to place all their Indians as speedily as possible under some sort of educational influence. In this way only can the terms of the treaties with the Sioux, Cheyennes, and Arapahoes, Kiowas, Comanches, and Navajoes be fulfilled.

Training schools.—No one can read the reports of the Carlisle, Hampton, and Forest Grove training schools, which will be found herewith, on pages 219, 223, and 238, without being impressed with the growing interest and value of the work they are doing, and without wishing that it might be increased four fold. Each school has exceeded the number for which appropriation was made, and they have enrolled respectively 390, 109, and 151 pupils. At each training in industrial and mechanical arts has been kept in the foreground, and the acquiring of habits of faithful continuous work has been the point most strenuously insisted upon. The success attained is fully attested by the number and value of the articles manufactured in the workshops for the use of the schools, and also by the fact that at Carlisle and Hampton they propose to furnish for the various Indian agencies during the current fiscal year 2,000 pairs of shoes, 3,350 dozen articles of tinware, 22 dozen bridles and halters, and 450 sets of harness. During the year Carlisle has sent 10 spring wagons to Indian agencies. The details of the work in these schools have been given in previous reports and need not be repeated here. Their standing and importance are now so fully recognized as to need neither explanation nor defense. They have been visited and inspected by men and women from all parts of the country, friendly and unfriendly, critical and lenient, enthusiastic and skeptical. The verdict has been uniform that these schools should be continued and enlarged, and other similar ones established. A visit to either of these schools will remove the most obstinate prejudice against Indian education.

The first Forest Grove "graduates" were returned to their homes this year. Superintendent Minthorn says:

> The first two lots of children that were brought to the school came with the understanding that they were to remain three years, and that time having expired, they were allowed to return home, but fifteen have returned to the school with the intention of remaining two years longer. Those that have remained at home are, with the exception of two, doing well. Three of the carpenters are working at their trade in New Tacoma, Wash., taking contracts, furnishing all the material, and building houses. They are giving good satisfaction and are making good wages. Two Indian agents have applied to the school for teachers for agency schools, but Government salaries were not a sufficient inducement, as the boys who have learned trades can get from two to four dollars per day and plenty of work. The indications at present seem to be that pupils leaving this school after having completed the course of study and learned a trade will generally seek employment among white people. But as most of the Indians upon this coast have good land, many will engage in farming, and for this reason it is doubly important that the school should have a farm.
>
> There does not seem to be so encouraging an outlook for girls leaving the schools as for boys; there does not seem to be any good place for an Indian girl in the present state of Indian society. Out of fifteen girls that were allowed to return to their homes, eleven have returned to the school, and one other is very desirous of returning; and two have been married to two young men who had been among the first to come to this school. They have made comfortable, pleasant, and happy homes. Ten others who have been here before have requested us to reserve places for them, as they intended to return in the fall.

Want of money and want of room has compelled the refusal of many urgent applications for admission to the Forest Grove school. It is a great mistake that Congress should have limited to 150 the number of pupils to be received in the only training school west of the Rocky Mountains, especially when the parents readily surrender their children for a five years' course. This school is not yet fairly equipped for work. Its buildings are unsubstantial in construction and inadequate in size, but are as good and commodious as the meager funds allowed therefor would build. It has no land except the lots on which the buildings stand, offered for that purpose by Pacific University. Its small leased farm is not adjacent to the buildings. Funds should be furnished

immediately to put up new buildings on a location not far from Forest Grove, where citizens have offered to donate to the Government for that purpose a large tract of good land. I hope Congress at its next session will appropriate not less than $25,000 for this purpose, and will provide for the support of at least 250 pupils in this school.

The students at Hampton have rejoiced this year in the completion of "Winona Lodge," a $30,000 building erected solely by benevolent contributions. It is devoted exclusively to the use of Indian girls, who have hitherto lived in cramped quarters. They take great pride in their new possession, and put new energy and conscience into their industrial work, for which it gives ample facilities. For Indian education at Hampton since 1878, as per General Armstrong's report, the Government has given $52,000; charity has given $81,000. If the Indian has made friends who are so generously disposed towards him, why should Congress say that only 100 Indians shall enjoy such privileges and benefactions, and then provide but $167 per capita with which to partially pay for their support?

An interesting experiment has been tried at the Hampton school this year by including among its students three young married couples. General Armstrong says:

> A feature of this year's work has been the taking of young married people as students in the school. Three such couples have been received, two from the Omaha and one from the Sioux tribe. The Sioux and one of the Omahas each brought with them a little papoose about a year old. The parents attend school half a day and work the other half with the other scholars. We have attempted at Hampton nothing more hopeful than this in training Indians. The husband and wife advance together with common interests. A home will be established on their return to the reservation and their future will be comparatively secure.
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> It is interesting to notice as side issues in this experiment the increase of courtesy in the brave for his wife and the growing care of the mother for her child, and the effort she makes to keep her husband's possessions, her room and her baby, and, last of all, herself clean and tidy. At first the father evidently regarded tending the little bit of humanity with scorn; but he has grown to take great pride in his boy, and often relieves the mother now of part of the burden.
>
> The three families are now in "Winona." It is intended to build during the summer two small frame houses, costing $200 apiece, like the better class of houses at the agencies, and to teach two of the families to make in them as attractive and happy homes as possible with such materials as can be procured at their homes. Their place in "Winona" will be filled by other carefully selected young married people, who will in their turn make the same experiment in housekeeping. Funds for these two cottages have been procured.

It gives me pleasure to report that within another year three new training schools will be in operation. Stone buildings to accommodate 150 pupils, at Chilocco, in the Indian Territory, near the Kansas border and contiguous to Kansas settlements, will be ready for pupils in December. At Lawrence, Kans., three large stone buildings for 340 pupils will be completed in January. Near Genoa, Nebr., the old brick Pawnee school building, standing on what was formerly the Pawnee reservation, is being thoroughly repaired and enlarged, so as to furnish room for 150 pupils, and will be finished next spring. The contract price of these buildings is about $82,000. A large additional expense must of course be incurred for heating apparatus, furnishing, outbuildings, fencing, &c.

Pupils in schools in the States.—Pupils were placed in schools in the States under the following item of the appropriation act of May 17, 1882:

> And the Secretary of the Interior is further authorized and directed to provide for the care, support, and education of one hundred Indian children not belonging to the five civilized tribes in the Indian Territory at any established industrial, agricultural, or mechanical school or schools other than those herein provided for, in any of the States of the United States, such schools to be selected by him from applications made to him, at a cost not exceeding one hundred and sixty-seven dollars per annum for

each child; and for this purpose there is hereby appropriated the sum of seventeen thousand dollars, or so much thereof as may be necessary: *Provided*, That not more than twenty of said pupils shall be educated in any one State.

These pupils were divided among schools in six different States. From all quarters the reports as to their deportment and progress has been entirely satisfactory. The advantages to Indian youth which must result from thus placing them in small companies among white communities are so evident that a similar appropriation of $75,000 has been made for the current fiscal year, which will provide for thus educating nearly 400. I deem it my duty, however, to call attention to the requirements of the act and the inadequate provision made for meeting those requirements. If the law means anything it means that industrial training shall be a prerequisite, that the girls shall learn sewing and housework and the boys be given first-class, thorough training in farming and the various trades; and that, in addition, the ordinary English branches shall be taught these youth who are unacquainted with the rudiments of civilized life, or even with the language of their instructors. No other fund being provided therefor the lodging accommodations, clothing, subsistence, medical attendance, and personal supervision of the habits and morals of the pupils must also be paid for out of the $167 per capita. This implies large buildings, an extensive outfit in the way of tools, materials, and machinery for carrying on trades, and a special corps of teachers for the special classes in schoolrooms and shops which would be formed out of these raw recruits to civilization. Realizing the discrepancy between the demands the office was about to make, and the equivalent it proposed to offer, the following letter was addressed to forty-three agricultural and mechanical schools endowed by national land grants, being a list contained in the report of the Bureau of Education:

The last Indian appropriation act provides for the "care and support and education of Indian children at industrial, agricultural, or mechanical schools in any of the States of the United States at a cost of not exceeding one hundred and sixty-seven dollars for each child." It also provides a limited sum to defray the traveling expenses of pupils from their homes to such schools.

The advantage of placing Indian youths in schools remote from reservations, where they will be surrounded by civilization and be obliged to learn and use the English language, has been abundantly shown, and the advancement in education and civilization made by Indian pupils under such circumstances has fulfilled the most sanguine hopes of the friends of the Indian. This office desires to extend such advantages to nearly four hundred Indian youths, and to place them in companies of from five to thirty in such of the various institutions of the country as are interested and prepared to receive them.

For the care and education of these youths, many of whom will be taken right from the camp, and most of whom will be ignorant of the English language, special facilities and special methods of instruction will be required. They will need training of every kind—mental, industrial, physical, and religious. The pupil must learn the language in which he is being taught, and this can only be acquired through object-lessons given with all the tact and ingenuity which the teacher can command. Outside of the school-room equally careful training must be given the girls in all branches of housekeeping, dairy-work, and sewing, and the boys in farming and gardening, and in some of the trades of carpenter, blacksmith, wheelwright, shoemaker, tinsmith, &c. These duties should occupy as much time and attention as the school-room work, and the instruction should not be theoretical but practical. In a word, Indian pupils must be taught how to read and write, how to think, how to live, and how to work.

In some institutions it may be difficult to provide the facilities needed for successful work with the amount allowed therefor by the Government, especially as the pupils must be cared for during vacations as well as term time, and the sum of $167 is all that is appropriated to cover all the expense of board, clothes, tuition, medical attendance, &c., of an Indian child during twelve months. But the growing interest which is being manifested in Indian civilization and education leads to the belief that many institutions will look at the matter from a philanthropic standpoint, and will be ready to supplement Government appropriations with private funds.

The pupils should be received as soon as practicable after July 1, next.

If your institution desires to take any Indian pupils on the terms named, you will please inform this office at an early day on the following points:

How many pupils you wish to receive, whether girls or boys, or both, and what ages would be preferred.

How soon you will be prepared to receive them.

What facilities you have or can have for industrial training, and what industries would be taught.

From only nine* institutions were replies received, and of these only one was prepared to take pupils, and that school could guarantee to instruct the boys only in farming and carpentry. Thus was confirmed the opinion expressed in my last report that there are very few schools in the country, except asylums and reform schools, that are ready to give to their pupils a home, an industrial and mechanical training, and a book education at the same time. The Bureau of Education gives a list of fifty-one industrial schools in the various parts of the country. Of these only six can teach boys farming or trades. Two are in the country in Maryland and Virginia, and the other four are in the cities of New York, Boston, Washington, and Cleveland.† It is evident that a large outlay is necessary to equip institutions for the work required of them, an expenditure for which the Government proposes to make no return, while it fixes the amount to be paid thereafter at less than the average actual cost of supporting and teaching the pupils. No generous response could be expected to such an offer. In this dilemma the various religious societies have come to the help of this Bureau and have so supplemented Government aid by private charity that the whole 400 pupils will be provided for. More than half are girls, because for their instruction in sewing and housework a comparatively small outlay is required. It is altogether probable that the training given will be neither so complete nor so varied as was contemplated by the act making the appropriation. On such terms the office cannot be exacting. The labor of awkward hands is wasteful, and only in rare cases will the products of the shops cover the expense of material and instruction. So long as the Government practically solicits the aid of private charity in the carrying on of Government work, private charity should have a hearing. There should be made to it at least a fair proposition, and I therefore renew a recommendation made last fall, that an appropriation be made that will enable the office to offer to any suitable institution that will furnish buildings, teachers, and all necessary machinery of the school a compensation of not less than $180 per annum for each Indian pupil supported and taught therein. This policy would secure the aid of men and money which can be reached in no other way, and the work of Indian education be immensely and permanently advanced. Private charity should be enlisted so far as possible. The outcome will be an intelligent interest in Indian civilization and a public sentiment substantial and permanent, which will outlive changes in administrations and parties and policies. To ask charitable institutions to furnish buildings and all equipments and then offer less than mere current expenses is unworthy of the Government. It is parsimony that becomes waste, and it justifies the following remarks of General Armstrong, which, while made in behalf of the Hampton School, have a wide general application.

While the charitable are willing to help in this cause, and it is well to call upon them, it is an unfortunate fact that they have too often been called upon to do what they have felt was forced upon them unjustly, and their liberal giving has been attended with no respect for those who are really responsible for Indians. Politicians,

* Hampton Normal and Agricultural Institute is a land-grant school, but being already engaged in Indian work was barred out by the statute.

† Report Bureau of Education, 1882.

as a rule, have faintly comprehended and often prevented wise work for the Indian, and with good intentions have made the best men reluctant to take hold of his education. Hampton's application, duly approved, for only $175 apiece per year, has twice been denied by Congress. There is room for twenty more girls, but there is no money to help, the appropriation bill providing for only one hundred at this place. We hope for better things from the next House, where the difficulty seems to lie. The last Congress, as above stated, provided for the education of four hundred Indians anywhere in the United States, excepting at Hampton and Carlisle, at the rate of $167 apiece, who are to be kept, clothed, &c., for the entire year, calling for their training in a more complete and difficult manner than, so far as I know, is given in any school in the land for whites. We can do it here only because the immense "plant" for the negro makes it possible. People may take Indians at that rate, but the work called for will not be done. I regard the provision as most unfortunate for the cause of complete training; it is adequate only when the labor of instruction is simply in farming along with the simplest education, or when Indians are put as apprentices into established work-shops. What Captain Pratt does well at $200 apiece for three hundred Indians, a private school will find it hard to do at $250 apiece for fifty Indians. The authorities seem as incapable of encouraging private effort as they are incapable of discouraging the few who have undertaken it.

The Society of Friends has received about forty Indians into one of their schools in Indiana on the terms allowed to Hampton, and when they shall come to introduce elaborate mechanical teaching will feel, as they even now do, the justice of our position.

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SANITARY CONDITION OF THE INDIANS.

Comparison with the preceding years shows an increase in the number of cases treated by the agency physicians, but a smaller percentage of mortality. The total number of cases under treatment for the year ending June 30, 1883, was 86,665. Total deaths, 1,283; total births, 1,862. The peculiar custom prevailing among the Indians of maintaining strict secrecy in regard to births and deaths renders the collection of reliable information on these points extremely difficult. During the year the Indian police have reported 197 deaths in addition to those occurring among cases treated by the physicians. The prevailing diseases in the north have been rheumatism and affections of the respiratory organs, with some malarial disorders in the extreme Northwest. In the south the affections have been chiefly malarial. On pages 362 to 371 will be found a tabular exhibit of the number of cases and character of diseases treated.

During the autumn and winter of 1882–'83 a small-pox epidemic was threatened in the south and southwest; also in the White Earth country in Minnesota; but prompt action in vaccinating the Indians and establishing quarantine prevented any serious consequences. The number of cases reported vaccinated for the year is as follows: Successfully, 4,076; unsuccessfully, 1,906.

Syphilis and its pathological sequences are prevalent among many tribes and are difficult to control on account of the lack of self-restraint among those treated and the tendency to disregard the instructions of the physicians. There seems, however, to be a slight improvement in this respect.

The evil influence of the native "medicine men" is one of the greatest obstacles to be overcome in the civilization of the Indian. These native doctors realize that the advance of civilization and enlightenment means a termination of their power and influence, and they employ all their arts and work upon the superstitions and fears of their people in order to prevent them from applying to the "white man's doctor," hoping thus to perpetuate their own power and sources of revenue. Hence the task of inducing the Indians to abandon their ancient customs in the treatment of disease is a difficult one, and must, of necessity, be the work *not* of years only, but of generations, as they adhere tenaciously to the

faith of their fathers in the power of the medicine men to exorcise the evil spirits, to whose presence they attribute all disease. It is gratifying, however, to note that as the older Indians pass to the "happy hunting grounds" their time-honored remedial rites gradually die out, and that the younger generations are evincing more faith in the medicines used and the treatment pursued by white physicians.

Another serious obstacle to the successful treatment of disease among the Indians is the inadequacy and in most cases the entire absence of hospital accommodations. When an Indian is treated by a white physician he expects to be cured by a single dose of medicine, and if he is not, he becomes discouraged and thinks the medicine of no value and will take no more. Again, he thinks that if a spoonful of medicine will benefit him, a bottle-full must necessarily do him a proportionate amount of good if all taken at one dose. This tendency to become discouraged and this disposition to disregard the instructions and admonitions of the physician cannot be successfully combated unless the patient is under the immediate care and control of the physician, and this is impracticable where there is no hospital. Small hospitals could be erected at agencies at slight cost, and the benefits accruing from such an auxiliary would speedily be apparent and more than compensate for the small outlay necessary. The advantage of such a system would be that the sick would be removed from the dangerous influence and interference of the medicine men and subjected to a regimen, the benefits of which they would not be slow to realize. The fame of such an institution would rapidly spread among the Indians and inspire greater confidence in the physician, thus becoming a valuable aid in inducing them to exchange the meaningless songs and incantations of the medicine men for the quiet, scientific, and rational treatment of the white man.

A RESERVATION FOR THE YUMAS OF ARIZONA.

The Yuma Indians have lived for many years on the bottom lands along the Colorado River for a distance of 10 miles above and 30 miles below Fort Yuma, in Arizona. Upon the representations of Lieutenant Hutton, Eighth Infantry, U. S. A., forwarded by the War Department, and of other trustworthy persons who knew of their destitute condition, a reservation has been recently set apart for the Yumas at the confluence of the Colorado with the Gila River, where it is hoped they may be gathered together and assisted in agricultural pursuits.

Some necessary relief has already been afforded them in flour purchased by the agent at the Colorado River Agency.

The chief of the Yumas states the number of his people to be 1,137, but Lieutenant Hutton estimates their number to be much greater. They are peaceable and industrious, and deserve substantial assistance at the hands of the Government. But few of the Indians are now on the reservation so set apart, and from the best information that can be obtained it is thought that those along the Colorado River should not be compelled to remove to the reservation until provision is made for some system of irrigation that will enable them to support themselves by farming.

COAL ON THE WHITE MOUNTAIN RESERVATION IN ARIZONA.

The coal discoveries on the San Carlos, or, more properly, the White Mountain Indian reservation, in Arizona Territory, formed the subject of extended notice in my last annual report. No action was taken on

the draft of a joint resolution prepared in this office and transmitted to Congress by the President on April 17, 1882,* and the status of the question has undergone no change or modification whatsoever. Bills were introduced in the last Congress (H. R. 4146 and 5378) providing for the reduction of the reservation on the south and west, but it appears they failed of passage. Had either of them become a law the coal fields would have been segregated from the reservation. I am still of opinion that the adoption of a system of leasing upon a royalty plan, such as was suggested in my last report, would be the best way to settle this vexed question.

MISSION INDIANS, IN CALIFORNIA.

The injustice done the Mission Indians, and their deplorable condition, have been set forth by several commissions and have been treated of at length in various annual reports of this office, especially in those of 1875 and 1880, and Congress has repeatedly been solicited to interfere in their behalf, but without avail.

The situation of these people is peculiar. It is probable that they are entitled to all the rights and immunities of citizens of the United States, by virtue of the treaty of Guadalupe Hidalgo, yet from poverty and ignorance and unwillingness to abandon their custom of dwelling together in villages, under a tribal or village government, they have failed to secure individual titles to their lands, under the public land laws, or under the Indian homestead act. Many of these Indians have been driven from lands occupied and cultivated by them for years, to which they had at least a color of title from the Spanish government, and the ejectments have often been made with force and violence.

After nearly all desirable land had been wrested from them or "taken up" by settlers a few small tracts remaining were set aside by Executive order for their permanent use and occupation, and entries unlawfully made by white men upon such lands have been held for cancellation. The few little villages left to them in the cañons of the mountains, from long years of cultivation have become extremely fertile, and are looked upon with longing eyes by the surrounding white settlers.

In accordance with authority granted by the Department, Mrs. Helen Jackson, of Colorado, was instructed, under date of July 7, 1882, to visit the Mission Indians in California, and ascertain the location and condition of the various bands; whether suitable land in their vicinity, belonging to the public domain, could be made available as a permanent home for such of those Indians as were not established upon reservations, and what, if any lands should be purchased for their use. At her request Mr. Abbot Kinney, of California, was authorized to assist in the work. Their final report gives, with great particularity, the condition of each village, recites in detail the wrongs that have been inflicted upon these Indians, and contains numerous and important recommendations for their improvement.

They recommend as the first and most essential step, the resurveying, rounding out, and distinctly marking of reservations already existing.

2d. The removal of all white settlers now on such reservations.

3d. In cases where their villages are included in confirmed grants that other provision be made for the Indians, or that they be upheld and defended in their right to remain where they are.

* Resolution printed in full in Annual Report Commissioner Indian Affairs, 1882, page L.

4th. That all the reservations be patented to the several bands occupying them; the United States to hold the patents in trust for twenty-five years; a provision to be incorporated in the patent for allotments in severalty from time to time, as they may appear desirable.

5th. The establishment of at least two or more schools in addition to the five already in operation at the various villages.

6th. That it be made the duty of the agent to make a round of inspection at least twice a year.

7th. The appointment of a law firm as special attorneys in all cases affecting the interests of the Indians.

This recommendation has already been carried out, Messrs. Brunson & Wells, of Los Angeles, having been appointed assistants to the United States district attorney in such cases, the appointment taking effect on the 1st of July last.

8th. A judicious distribution of agricultural implements among these Indians.

9th. A small fund for the purchase of food and clothing for the very old and sick in time of special destitution.

10th. The purchase of certain tracts of land.

The necessity for the action recommended is given with great clearness and force in each case. With these recommendations, with the possible exception of the last, I fully agree, and will hereafter submit a draft of the necessary legislation. With the measures already taken and with those herein recommended, it is believed that these poor and persecuted people may be protected from further encroachments, and enjoy in some measure the prosperity to which their peaceful conduct under all their wrongs entitles them.

KLAMATH RIVER RESERVATION IN CALIFORNIA.

The Indians residing upon the Klamath River reservation in California have been required to select the particular tracts of land they desire to retain for their permanent homes in quantity as follows:

Each head of a family 160 acres; each person over eighteen years of age, 80 acres; each orphan child under eighteen years of age, 40 acres. It is expected that when the selections shall have been made and reported with proper metes and bounds, action will be had on the question of restoring the remainder of the reservation to the public domain. The selections are being made under the personal supervision of the acting Indian agent of the Hoopa Valley agency.

COMMISSION TO SIOUX OF DAKOTA.

The commission appointed under authority contained in the act making appropriations for the sundry civil expenses of the Government approved August 7, 1882 (22 Stat., 328), "to negotiate with the Sioux Indians for such modification of existing treaties and agreements with said Indians as may be deemed desirable by said Indians and the Secretary of the Interior," rendered their report to the Department during the latter part of January last. The report, together with a copy of the agreement negotiated with said Indians, was submitted to the President under date of February 1, 1883, and transmitted to Congress on February 3 following. By the terms of said agreement the Great Sioux Reservation, having an area estimated by recent computation at 35,124½ square miles, or 22,479,680 acres, was to be broken up into five smaller independent reservations, to be occupied by the several bands separately, they severally agreeing to accept the same as their permanent

homes, relinquishing all right, title, and interest in and to the reservations assigned to the other bands, respectively, reserving to themselves only the reservation set apart for their separate use and occupation. The five reservations to be retained under the conditions of the agreement are estimated to contain about 19,238 square miles, leaving an area, according to the foregoing estimate, of 15,886¼ square miles, or 10,167,360 acres, which the Indians cede to the United States.

The principal consideration for this important cession of territory consists of cattle for breeding purposes. The other considerations being, as remarked by the commissioners, such as are calculated to promote the education and civilization of the Indians, and they are in the main only a continuation of the treaty stipulations of April 29, 1868.

Congress failed to ratify the agreement thus made, but by act of March 3, 1883, appropriated the sum of $10,000 to continue the negotiations, with certain modifications of said agreement (22 Stat., 624). The commission as originally composed was authorized to continue the work.

The Indians of the Crow Creek Agency, not having been parties to the above-mentioned agreement made with the other bands, assented to the same by a subsequent agreement dated February 26, 1883. . By this agreement they became parties to the first agreement made, and a reservation of about 300,000 acres was retained for them within that part of the Great Sioux Reservation east of the Missouri River known as the old Winnebago and Crow Creek Reservations. This adds another to the reservations to be retained, making six in all.

The final report of the commission has not been submitted as yet.

* * * * * * *

THE TURTLE MOUNTAIN COUNTRY IN DAKOTA.

Under date of October 4, 1882, the Department directed the General Land Office to take such steps as might be necessary to revoke the action by which that vast area of country lying north and west of Devil's Lake in Dakota, heretofore claimed by the Turtle Mountain band of Chippewas, had been withheld from the practical operation of the settlement laws, and to restore the same to the public domain, subject to the restriction, however, that if there were any Indians who had made improvements, or had attempted to make permanent location on any of said lands, such Indians should be protected by having their lands withheld from white settlement until they could have an opportunity to secure title thereto. By this action a tract of country estimated to contain over 9,000,000 acres was thrown open to white settlement. Subsequently (on December 21, 1882) a tract in the vicinity of Turtle Mountain, embracing an area of about 32 miles from north to south by 24 miles from east to west, was withdrawn from settlement by executive order, the main purpose being to secure lands upon which the Turtle Mountain band might be severally located, either upon tracts already improved by individual Indians, or upon lands to be allotted to them. For this object Congress, by act of March 1, 1883, appropriated the sum of $10,000. Steps have been taken to have the public surveys extended over said reservation, with a view to the early settlement of the Indians as proposed.

In fulfillment of a promise of the Department, made to the delegation of Turtle Mountain Indians who visited this city last winter, Special Agent Cyrus Beede recently made a visit to the Turtle Mountain coun-

try under special instructions from this Bureau. He found the full-bloods of the band, numbering, as he believes, not over twenty-five families, unprepared and altogether disinclined to take lands in severalty, preferring to have a small reservation retained for them permanently. The half-breeds, on the contrary, are anxious to secure individual homesteads. As near as he could ascertain, in the absence of boundary marks, the latter are for the most part living outside the limits of the reservation along its eastern line, where it appears they are making good progress in opening farms, building houses, &c., some of them being very well to do. Inasmuch as it is the desire of the full-bloods to have a small reservation retained for their use in common, I deem it advisable, and therefore recommend, that two townships of their present reservation be retained as a permanent reservation for those who do not desire to take homesteads. The half-breeds and any full-bloods who may have settled upon and improved individual tracts are protected by the instructions of the Department to the General Land Office before mentioned, and at the proper time will be assisted in securing permanent title to their lands.

NORTHERN CHEYENNES AND ARAPAHOES.

In accordance with the appropriation of five thousand dollars which was made by the last Congress to be "expended in removing the Northern Cheyenne and Arapaho Indians now in the Indian Territory to a more favorable location," on the 19th of July last Agent John D. Miles, of the Cheyenne and Arapaho Agency transferred, with subsistence for sixty days, to Lieut. C. J. Stevens, Ninth United States Cavalry, 391 Cheyennes and 14 Arapahoes to be removed to the Pine Ridge Agency, Dakota. Of the 405 thus transferred, it appears that about 60 of them have since returned to the Cheyenne and Arapaho Agency and have decided to remain there.

FORT HALL RESERVE, IDAHO.

At the first session of the Forty-seventh Congress, bills (S. 1643 and H. R. 3503) to ratify the agreement of May 14, 1880, with the Shoshone and Bannack Indians for the cession of a portion of the southern half of the Fort Hall Reservation, including Marsh Valley and the settlements therein, were reintroduced. The House bill was favorably reported in committee at the same session (H. R. Report No. 658), but no further action was taken. It is the intention of this office to again submit a bill to ratify the agreement, for transmission to Congress in the hope that the matter may be disposed of at the ensuing session.

CREEK DIFFICULTIES.

On the 2d of August last Clinton B. Fisk and E. Whittlesey, president and secretary, respectively, of the Board of Indian Commissioners, Senator Coke, of Texas, Hon. D. C. Haskell and Hon. John Martin, of Kansas, and Hon. George R. Davis, of Illinois, were requested to serve as a Commission to visit the Indian Territory for the purpose of investigating, and, if possible, of harmonizing the difficulties existing in the Creek Nation. On account of previous engagements none of these gentlemen, except Commissioners Fisk and Whittlesey, could find it convenient to serve.

These two gentlemen met in the office of United States Indian Agent, John Q. Tufts, in Muscogee, August 6 last, and proceeded with the investigation. The chief of the Creek Government, Samuel Checote, was invited to appear before the Commissioners, with such of his associates in the Government and other leading men as he might select. Ispahechee, the leader of the party of Creeks who have been in open hostility to the constituted authorities, was also summoned from his camp, in the western portion of the Creek country, with his corps of advisers, that they might have an opportunity of submitting to the Commissioners their complaints and wishes. The Creek Government, through Chief Checote and fourteen of the principal men of the Nation, presented in writing a full statement of the causes leading to the troubles in their country as understood by them. Ispahechee and his chief associates and advisers, fifteen in number, also presented in writing their statement of grievances and wishes.

In addition to these written statements, opportunity was given to the respective delegations to address the Commissioners, and nearly every delegate used this privilege, until both sides had presented their views to their own satisfaction. It was then agreed that a subcommittee from each delegation be appointed, to whom should be assigned the duty of making every possible effort, in mutual conference, to adjust their unhappy differences. A full and free discussion of all matters of disagreement between them was solicited, and was participated in by the various chiefs and others specially invited. The discussion was ably and intelligently conducted by both sides, and was characterized by a spirit of kindness and conciliation which was highly commendable, and reflected great credit upon the various participants. Both sides appeared to be anxious to reach an amicable solution of existing difficulties, with a view to having the supremacy of civil law restored and firmly established throughout their nation; and this sentiment was promptly seconded by the Commissioners.

As the full report of the investigation has been printed in convenient form for distribution, I do not deem it necessary to refer, in detail, to the various alleged complaints arising from past differences among these people. I am, however, pleased to be able to report that the joint committee on adjustment, after several sessions held in the presence of the Commissioners, and during which there appeared to be an increasing good fellowship, finally reached a basis of peace, and on the 10th of August the following articles of agreement were presented at a public meeting and formally signed in triplicate by the chief men of both parties, in the presence of the Commissioners and many other witnesses:

Conditions upon which the difficulties growing out of the late disturbances in the Creek Nation shall be adjusted, it being understood and agreed upon by the parties hereto that they will personally and officially use their best endeavors to secure such legislation by the National Council as is recommended in the following proposition:

I. We recognize the binding force of existing treaties between the United States and the Creek Nation, and declare our earnest desire to preserve the integrity of the Creek Nation and to re-establish and maintain harmony among the Creek people.

II. We recognize the constitution of the Creek Nation, but desire that the council which shall meet after the pending election, and composed of the members then chosen, shall so amend it by reducing the present representation and other measures of reform as shall reduce to a reasonable sum the expense of the Government of the Creek Nation.

III. We agree that a full and unconditional amnesty and pardon shall be granted for all alleged criminal offenses, political or otherwise, committed prior to the present date, as provided by the act of the National Council of October 16, 1882, it being understood and agreed upon that should there be any dispute as to whether any

offense charged against any person is such a one as has grown out of the late trouble in the Nation, then, in such case, the facts shall be submitted to the Indian agent, whose decision shall be final.

IV. It is recommended that the Creek authorities provide either to abolish or for a careful reorganization of the Light Horse by dismissal of officers and privates who have used oppressive violence in executing the law, and that vacancies be filled by good men who will firmly but cautiously exercise their authority.

V. That the Creek National Council should appoint a commission of able, faithful, and impartial men, representing both parties, to whom shall be referred, with power to audit and recommend payment thereof, the claims of parties whose property has been unlawfully seized and destroyed during the late disturbance.

VI. That all parties participate in the approaching election and use every effort to secure a full, free vote, and a fair count, and then accept cheerfully the result and submit to the will of the majority.

VII. That the United States troops within the Creek country be stationed in one camp, at Okmulgee, to maintain peace and assist the civil officers in the enforcement of law and order during such period as the colonel commanding and the Indian agent may deem such military occupation necessary.

The object sought by this office in the appointment of the aforesaid Commission has been, in my opinion, fully realized, and valuable information for future reference has been collected. The basis of settlement finally agreed upon appears to have been accepted in good faith by all parties concerned, and will probably tend to the establishment of permanent peace in the Nation.

For many weeks before the appointment of this Commission serious hostilities had existed, and the conflict between the two parties had resulted in the loss of many lives on both sides, and it seemed as if an open warfare of considerable magnitude was inevitable; but, by the prudent and painstaking efforts of Commissioners Fisk and Whittlesey, the unhappy difficulties were speedily reconciled, an amicable termination of the troubles was reached, and the aforesaid conditions of peace were agreed upon.

Too much credit cannot be given these gentlemen for the able and conscientious manner in which they performed the delicate duty assigned them. The labor and time required were promptly and cheerfully given, and I take this occasion to express my high appreciation of their valuable services.

CREEK AND SEMINOLE BOUNDARY.

In my annual report for 1881, pages LIV–LVI, was submitted the history of the Seminole Indian Reservation in Indian Territory, &c., with a recommendation that Congress adopt the requisite legislation and provide the necessary means to purchase from the Creek Nation the lands occupied by the Seminoles. In my report for 1882, pages LIV, LV, reference was made to the proposition of the Creeks to sell 175,000 acres of their land for the Seminoles; also to the recommendations of this office as to the legislation necessary to carry this proposition into effect, and also to the action of Congress in making an appropriation for the purchase of the land as per agreement of the Creeks made February 14, 1881.

No provision having been made for a survey of the outboundaries of said purchase, it was recommended that an appropriation be made sufficient to enable the Department to establish said boundaries and determine the area of this tract. For this purpose $3,000 was asked of Congress at its last session.

The appropriation was not made, and the recommendation is now renewed.

"CHEROKEE OUTLET," OR LANDS WEST OF 96°.

By the sixteenth article of the treaty of July 19, 1866, the Cherokee

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outlet, containing 8,144,772.35 acres, was dedicated to the settlement thereon of friendly Indians by the United States.

In pursuance thereof settlements have been made thereon and deeds of conveyance for each tract, dated June 14, 1883, have been executed by the Cherokee Nation to the United States in trust for each of the following tribes, aggregating 2,121,028.74 acres, viz:

Tribe.	Area in acres.	When settled.	Authority.
Osage	1,470,058.98	April, 1872	Act of Congress June 5, 1872 (17 Stat., 228).
Kansas	100,137.32	June 21, 1873	Act of Congress June 5, 1872 (17 Stat., 228).
Pawnee	230,014.04	June, 1875	Act of Congress April 10, 1876 (19 Stat., 29).
Ponca	101,894.31	July 28, 1878	Act of Congress May 27, 1878 (20 Stat., 76).
Nez Percé	90,710.89	Feb., 1879	Act of Congress May 27, 1878 (20 Stat., 74).
Otoe and Missouria	129,113.20	Oct. 23, 1881	Act of Congress March 3, 1881 (21 Stat., 318).

Recommendation is now made that Congress extend to the Secretary of the Interior the necessary authority to make allotments of land in severalty whenever any of said tribes shall express a desire for such assignment.

FREEDMEN IN INDIAN TERRITORY.

Since my last Annual Report setting forth the rights of freedmen in the Indian Territory, as stipulated in the several treaties with the five civilized tribes, action in regard to their freedmen has been taken by the Choctaws. The Indian appropriation act of May 17, 1882, appropriated the sum of ten thousand dollars for the education of freedmen in the Choctaw and Chickasaw Nations, under certain restrictions, in language as follows:

That the sum of ten thousand dollars is hereby appropriated out of the three hundred thousand dollars reserved by the third article of the treaty with the Choctaws and Chickasaws concluded April eighth, eighteen hundred and sixty-six, for the purpose of educating freedmen in said tribes, to be expended under the direction of the Secretary of the Interior, three-fourths thereof for the freedmen among the Choctaws, and one-fourth for the freedmen among the Chickasaws; *Provided*, that said sum of ten thousand dollars shall be deducted in like proportion from any moneys in this act appropriated to be paid said Choctaws and Chickasaws; *And provided further*, that either of said tribes may, before such expenditure, adopt and provide for the freedmen in said tribe in accordance with said third article, and in such case the money herein provided for such education in said tribe shall be paid over to said tribe, to be taken from the unpaid balance of the three hundred thousand dollars due said tribe.

In accordance therewith the Choctaw Council passed an act providing for the adoption of their freedmen; but on examination it appeared that the act was not such as was calculated and necessary to give all freedmen of African descent, residents in the Choctaw Nation at the date of the treaty of Fort Smith, and their descendants, heretofore held in slavery, all the rights, privileges and immunities of citizens of the Choctaw Nation, as provided in the third article of the treaty of 1866. The office was therefore obliged to withhold approval of the act, and to refuse to pay over to the Choctaw Nation any portion of the $10,000 appropriated by the item above referred to.

The Chickasaws have not, through their Council, taken any action, favorable or otherwise, respecting their freedmen since my last report. The Cherokees have also failed to take any action in regard to their freedmen. The freedmen themselves have held conventions and sent delegates to Washington, asking the protection and assistance of the Government in securing all the rights in the respective nations to which

they are entitled by treaty. There being no doubt as to the right of the United States to settle the freedmen of the civilized tribes in the "Oklahoma district," report was made on the 25th of February, 1883, favoring such settlement, and submitting a draft of an item to be inserted in the deficiency bill appropriating funds to enable the Secretary of the Interior to carry out said design, with authority to assign land to such as might be found to be entitled. No action was taken by Congress; but the exigencies of these freedmen demand attention, and I recommend that legislation be asked authorizing their settlement in the Oklahoma district, under some well-defined jurisdiction and form of government, with power to the Secretary of the Interior to determine what freedmen should be allowed to settle therein; or else that such stringent laws be passed as will compel the respective tribes to adopt the freedmen as provided in their treaties.

INTRUDERS AND DISPUTED CITIZENSHIP IN FIVE CIVILIZED TRIBES OF THE INDIAN TERRITORY.

The several civilized tribes of Indians in Indian Territory, especially the Cherokees and Choctaws, claim to have the exclusive right to determine who are intruders in the tribes and who are entitled to Indian citizenship therein, and claim that this Government is bound to remove all persons adjudged by them to be intruders. As the Department held opposite views, the matter was submitted to the Hon. Attorney-General, and in his opinion of December 12, 1879 (16 Opinions, 404), he states that in executing treaties the United States is not bound to regard Cherokee law and its construction by the Council of the nation, but that any Department required to remove alleged intruders must determine for itself, under the general law of the land, the existence and extent of the exigency upon which such requisition is founded.

By the Cherokee census of 1880 it appears that there were 521 claims to citizenship rejected, 265 claims pending, and 1,821 cases of intruders. Governor J. F. McCurtain, under date of December 22, 1882, submitted a list of 2,847 intruders in the Choctaw Nation, of which 2,290 were whites and 557 were freedmen from the States, who were settled in nine districts of the nation, leaving seven districts not reported. There are four classes of persons involved in this issue: (1) White persons who have married into one of the several tribes; (2) persons with an admixture of Indian blood, through either father or mother; (3) adopted persons; (4) persons of African descent who claim rights under the treaties of 1866. Instructions were issued Agent Tufts July 20, 1880, not to permit the removal of any of these four classes of claimants when, after a careful examination, he was satisfied a *prima-facie* just claim to citizenship existed, until their cases had been disposed of under such rules as the Department should adopt or approve.

With a view to the adjustment of this intricate question, and the adoption of rules by the Department and said tribes governing its settlement, Indian Inspector Henry Ward and Special Agent Cyrus Beede were instructed on the 9th of May last to visit the Indian Territory, consult Agent Tufts and the files of his office, and thus familiarize themselves with the question in all its details and ramifications; then to visit and consult the executive officers of the several nations and endeavor to arrive at some understanding with them in the adoption of some rules of procedure, subject to the approval of the Secretary of the Interior, under which all questions of disputed citizenship and intrusion might

be determined satisfactory to said nations and the Department; all cases where a satisfactory understanding could not be reached, to be submitted, with a full statement of disputed points. These gentlemen submitted a report on the 2d of June last, but they failed to accomplish the object desired.

In view of the magnitude of the interests involved and the unsettled condition of these nations consequent upon the presence of this unrecognized population, and its rapid increase among them, I respectfully recommend that Congress authorize the appointment, and provide for the payment of the expenses, of a commission, whose duty it shall be to visit these nations, consider the points of difference between the Indians and the alleged intruders or non-citizens, and, after determining upon rules of procedure for the final adjustment of the question, attend the councils of said nations and submit said rules for their consideration and action, which, when adopted by them and approved by the Department, shall be final and conclusive.

PONCA, PAWNEE, AND OTOE AGENCY.

The experience of another year has confirmed me in the opinion I expressed in my last report, that any attempt to consolidate various tribes under one agent, when it is impracticable to gather them on one reservation, must result in failure, if the object desired is either to benefit the Indians or to manage them with greater economy. This is particularly noticeable in the case of the present Ponca, Pawnee, and Otoe Agency in Indian Territory. The headquarters of this agency are at Ponca, about twenty miles from the Otoes and about forty from the Pawnees. The agent also has to look after what was once the Oakland Agency, where the Nez Percés are, which is some eighteen miles northwest of Ponca. These subagencies are necessarily left in charge of superintendents or clerks who are not bonded officers, and whose accounts are completed and rendered by clerks at Ponca. Of course an agent cannot spend much time at either of the four reservations. This is the greatest evil of the arrangement, as nearly all agencies require the continual presence of the agent, who is alone responsible for the Government property, and all that occurs there; and the Indians have been led by the Government to expect an agent to reside with them, and to constantly exercise a fatherly care over them.

The Pawnees especially require the daily presence of an energetic agent, and the benefit they would thus derive could not fail to be well worth a considerable additional expense to the Government. But by placing an agent at Pawnee who could also take charge of the Otoes (which two tribes have long been very friendly towards each other), and by allowing an agent for Ponca and the subagency of Oakland (as before the consolidation), the expense of caring for these four tribes would be very little, if at all, increased, as the extra traveling expenses of agents and the expense of clerical services, which could then be dispensed with, would go far towards paying the salary of the additional agent. I would therefore recommend that Congress be requested to provide a separate agent for Pawnee Agency, who shall also have charge of the Otoes.

KICKAPOO ALLOTTEES UNDER TREATY OF 1862.

In my last two Annual Reports attention was called to the condition of affairs relative to the estates of deceased and minor allottees, under

the provisions of the treaty with the Kickapoo Indians of June 28, 1862 (13 Stat., 623), and to the fact that the treaty contains no provision whereby female allottees can become citizens and obtain patents for the land allotted to them.

Frequent application is made to this office by the heirs for the settlement of the estates of allottees who deceased before having, by a compliance with the treaty provisions, become citizens and obtained patents for their land; and requests are made by female allottees that some action be taken whereby they can become citizens and obtain patents for the lands. The benefits of the treaty should be extended to all adult allottees, without regard to sex, and provision should be made for the settlement of the estates of the class of allottees referred to. This subject was before the last Congress, but received no final action.*

RESERVATIONS FOR THE KICKAPOOS AND IOWAS IN THE INDIAN TERRITORY.

Under the provisions of the acts of Congress approved July 15, 1870 (16 Stat., 359), and March 3, 1871 (16 Stat., 569), some four hundred of the Kickapoo tribe of Indians, who left the State of Kansas and migrated to Mexico in 1863 and 1864, were returned to the United States and settled in the Indian Territory in 1873 and 1875. Although lands were promised them no steps were taken to secure them in possession of the lands which they have continued to occupy. Inasmuch as the insecurity of their title was a source of uneasiness and discontent an Executive order was issued August 15, 1883, setting apart for their permanent use and occupation a tract of land west of the Sac and Fox Reservation in the Indian Territory, sufficient for their present and future wants.

A considerable number of the Iowa tribe have also resided for several years in the Indian Territory immediately north of the tract occupied by the Kickapoos, and an Executive order setting apart the tract of country referred to for the use and occupation of the Iowas and such other Indians as the Secretary of the Interior might see fit to locate thereon was also signed by the President on the same date, August 15, 1883.

These tracts are within the "Oklahoma district" which has been subject to incursions by Payne and others, and it is believed that this action will tend to defeat such attempts at colonization. The lands thus set apart should be secured to these Indians by a more permanent title, and legislation providing for the issuance of patents will be recommended at the coming session of Congress.

SALE OF KICKAPOO LANDS IN KANSAS.

On the 28th of May last, instructions were given to a Commission appointed to appraise certain Kickapoo Indian lands in Kansas, the appraisement and sale of which were authorized by the act of Congress approved July 28, 1882 (22 Stat., 177). Their report was submitted on the 12th of July last. It appears from the schedule of appraisement, accompanying their report, that the total number of acres appraised was 1,134.66, at a total valuation of $14,342.79, being an average of $12.64 per acre. The schedule was approved by you July 20, 1883, and the

* See Senate Ex. Doc. No. 55, Forty-seventh Congress, first session.

necessary instructions regarding the sale of the lands transmitted to the General Land Office on the same date.

KANSAS INDIAN INDEBTEDNESS REPRESENTED BY "KAW SCRIP."

In my last Annual Report I discussed at some length the subject of this indebtedness, referring to the long delay in its settlement and the great hardship resulting to individual holders of the scrip representing the same. A strong effort was made by those interested in its payment to have the matter brought to the attention of Congress at its last session, with a view to securing an appropriation sufficient to wipe out the entire outstanding indebtedness, principal and interest, the money to be reimbursed to the Government from the sale of the Kansas Indian lands. But the matter took no definite shape, and the unfortunate delay still continues. A draft of the proposed legislation having been submitted to this office by the chairman of the House Committee on Indian Affairs, for an expression of opinion thereon, I took occasion to commend the measure and urge its favorable consideration in terms as follows:

I have the honor to acknowledge the receipt of your letter of this date, inclosing a draft of an item intended for insertion in one of the appropriation bills, providing for the payment of the so-called "Kaw" or "Kansas Indian scrip," upon which you desire an expression of opinion by this office as to the wisdom of the proposed measure, and its fitness as to form, &c.

In reply I have to say that the measure itself meets the hearty approval of this office, and as regards its form, I think it as good as could be devised. By every principle of justice this scrip should be paid, and there is no ground on which to base argument for further delay in that direction. Great hardship has been inflicted upon the holders of these unredeemed certificates. Their appeals for some sort of settlement have been incessant, and the long continued delay has not only provoked the severest criticism from many, but has led others even to doubt the good faith and sincerity of the Government in the premises.

Perhaps the Government ought not to be held responsible for the apparently endless delay in the settlement of this indebtedness. It has been caused mainly by the failure to sell the lands belonging to the Indians as rapidly as was anticipated at the time, an accident that could not well have been foreseen. Beside this, the Government has insisted upon the reimbursement of a large sum of money advanced to the Indians for various beneficial purposes before it would permit the payment of any of these certificates in cash out of the proceeds of the sale of said lands. In thus securing itself against loss, which was entirely proper, the Government has unintentionally inflicted a hardship upon the holders of these certificates, and I think it would be no more than right to extend to them the relief that this measure proposes.

In response to a resolution of the Senate of 26th January last, this office submitted to the Department, under date of March 9th last, a brief history of the indebtedness represented by the certificates herein referred to, a statement of the amount of the same, its status at that time, as well as a statement of the assets of the Indians held by the Government. Said report forms the subject-matter of Senate Ex. Doc. No. 136, Forty-seventh Congress, first session, to which your careful attention is invited.

Since the rendition of said report the money received from the sale of lands has been more than sufficient to discharge the balance then due the Government on account of money advanced, which balance was stated to be (approximately) $11,475.86, and there is a small amount on the books of this office to the credit of the Indians. Of course, whatever amount may be appropriated will be reimbursed to the Government as the sales progress, and should therefore be considered simply in the nature of a loan.

I hope the matter may receive the favorable consideration of Congress.

The amount on the books of this office to the credit of the Indians has been increased since the date of the above (December 11, 1882) to a little over $30,000. This amount will be enlarged as the sale of lands continues, but for the reasons stated in my report of last year, where the subject is more fully discussed, none of the indebtedness represented by these scrip certificates can be paid until authority of Congress is had therefor. I trust this will not be delayed beyond the next session.

BOIS FORTE BAND OF CHIPPEWAS IN MINNESOTA.

By the treaty concluded April 7, 1866, with the Bois Forte band of Chippewa Indians (14 Stat., 765), two reservations were to be set apart for the perpetual use and occupancy of said Indians, one of not less than 100,000 acres, which should include Netor Lake, and the other a township on Grand Fork River, at the mouth of Deer Creek, both in Northern Minnesota. The larger reservation was selected, and the outboundaries thereof marked, in the fall of the year in which the treaty was made (1866), but on account of the extreme severity of the weather the expedition sent out for the purpose of making the selections was unable to reach the Grand Fork, and turned back without having selected the smaller reservation. No further attempt appears to have been made to select the reservation at the mouth of Deer Creek, owing, no doubt, to the fact that there were no white settlements in that vicinity, and the Indians were in undisturbed possession. Latterly, however, the country there has been filling up with settlers, and for the better protection of the Indians, and at their earnest solicitation, it was thought best to declare the reservation at the mouth of Deer Creek, which was done by Executive order dated June 30, 1883, by which order township 62 north, range 25 west, of the fourth principal meridian, has been set apart for the perpetual use and occupancy of said Indians.

RESERVOIRS AT THE HEADWATERS OF THE MISSISSIPPI.

By the river and harbor acts of June 14, 1880, and March 3, 1881, authority was given the Secretary of War to erect dams and construct reservoirs at the headwaters of the Mississippi River, and in the execution of this authority some of the lands belonging to the Pillager and Mississippi Chippewas, in Minnesota, were required for the reservoirs at Winnebigoshish and Leech lake. Provision was made in said acts for the payment, to friendly Indians, for all injuries incurred in the construction of reservoirs and damages to private property, and a Commission, consisting of Messrs. A. Barnard, of Minneapolis, Thomas Simpson, of Winona, and Louis Morell, of this office, was appointed and instructed, August 20, 1881, to ascertain and determine the injuries sustained and value the damages payable to said Indians by reason of the construction of said dams and reservoirs. This Commission submitted a report, assessing the damages arising from the construction of the dam at Lake Winnebigoshish at $8,393.30, and at Leech Lake $7,073.60; but the Indians, holding that this assessment was inadequate compensation for the losses and injuries to be sustained, refused to accept any portion thereof. Another Commission, consisting of Gen. H. H. Sibley, ex-Governor W. R. Marshall, of Saint Paul, and Rev. J. A. Gilfillan, missionary at White Earth Reserve, was appointed December 22, 1882, and instructed, on the 9th of January, 1883, to visit these Indians and make a personal examination of the localities surrounding said reservoirs, and review the former valuation with a view to a reassessment, if in its judgment the injury was greater than the compensation heretofore allowed. This Commission has not yet submitted its report and the subject remains in abeyance, while the Indians are patiently awaiting results.

INDIAN LANDS IN MINNESOTA RESTORED TO THE PUBLIC DOMAIN.

By Executive order dated July 13, 1883, the Executive addition to the White Earth Reservation, in Minnesota, created by Executive order of March 18, 1879, was restored to the public domain. The lands were withdrawn from settlement in view of the proposed consolidation of the various bands of Chippewas in Minnesota upon the White Earth Reservation, in order that there might be a sufficient quantity of land secured for their permanent settlement there. The hope of effecting such consolidation having been abandoned, it was thought best to restore the lands to the mass of the public domain. About thirteen townships are thus opened to white settlement. The lands are north of and adjoining the White Earth Reservation, and between that and the Red Lake Reservation.

DEPLORABLE CONDITION OF INDIANS IN MONTANA.

The reduction by Congress of appropriations for subsistence of the Blackfeet, Blood, and Piegan Indians, and of the Indians at Fort Peck and Fort Belknap agencies, has already caused a great deal of suffering among these Indians, and is a source of constant and increasing anxiety and embarrassment to this office. It is true that the Indians show a willingness to add to the supplies furnished by the Government by taking advantage of such facilities for procuring subsistence as their reservations naturally afford or can be made to yield by cultivation; stil lit is clear that, from causes beyond their control or that of this Bureau, they have lately needed more assistance from the Government than formerly, as the game upon which they have depended principally for food and clothing has been gradually diminishing, until it is now nearly extinct, while repeated trials have shown that successful farming on these reservations would be impossible, even to whites, without the necessary irrigating ditches, fences, stock, &c., and for such purposes no funds have been supplied.

Speaking of the Blackfeet, Blood, and Piegan Indians in a report dated July 26 last, an Indian inspector says:

> There can be no doubt but many of the young children died from lack of food during last winter and spring. Never before have I been called upon to listen in an Indian council to such tales of suffering. Three or four years ago this reservation abounded in game and these Indians were, practically, independent of the Government; now, nowhere else have I ever seen a country so destitute of it as this, and there is, practically, nothing for the people to live upon but what is furnished by the Government. I cannot believe that Congress was fully aware of the change in the surroundings of these Indians when the annual appropriation was diminished.

In refererence to the same Indians a special agent reports, under date of August 21 last:

> Last week 3,200 persons presented themselves as actually in need of subsistence, to furnish which, in the established quantities (which are found to be merely sufficient to sustain life) for the balance of the fiscal year, would require at least four times the quantity of flour supplied, and although but half a ration is issued, it will all be exhausted about midwinter, and all the beef available will be gone about the same time, although but one-fifth the established ration is being issued. I am fearful that unless additional supplies are furnished depredations must be expected to prevent starvation, and early action is neccssary, as the severe winter here renders transportation of supplies at that time impossible in this country.
>
> This reservation cannot be farmed without irrigation, no preparation for which has been made; therefore but little can be expected from Indian cultivation, and as illustrative of the seasons here, this morning, August 21, the ground around the agency is covered with snow.

Under date of the 14th ultimo, an Indian inspector speaks of the Indians at the Fort Peck Agency, whose reservation adjoins that of the Blackfeet, &c., as follows:

During my visit all the Indians were in camp, having returned hungry from a hunt which was unsuccessful. They farm about 700 acres, nearly every field of which I visited. Their crops, which are principally corn, are a total failure, although well tended; the squaws, in many instances, still hoeing and working in the fields, although it is evident they cannot possibly raise anything. Last year, also, their crops were almost a total failure. As it is, some extra provision must be made for this people during the winter, or trouble will come. It will require at least 1,000,000 pounds of beef to keep them from suffering. Unless this is furnished, or they find plenty of buffalo (the latter even hardly to be look for), they cannot be prevented from committing depredations on stock wherever they can find it.

Their crops must be watered during the growing season, or farming might as well be abandoned here. A field of 1,000 acres on the river bottom near the agency can be thoroughly irrigated by a ditch which could be dug by the Indians for pay in provisions, to cost about three or four thousand dollars. From this field enough vegetables and breadstuffs could be raised every year to supply all their wants in that line. This outlay would be great economy, as otherwise, if these Indians are to remain where they are they will have to be fed entirely by the Government, as they cannot be expected to succeed in farming where a white man would starve.

The agent in charge of Fort Belknap Agency, the home of the Gros Ventres and Assinaboines, also adjoining the Blackfeet, writes under date of 21st ultimo:

Game on this reservation is practically exhausted. My Indians, many of whom have lately returned to the agency from hunting, all concur in this statement, the truth of which is established by my own observation and by a report of an officer of the United States Army who has lately made an extended expedition over the reserve.

My Indians are already coming in every day complaining of hunger, but I can feed them very little as the winter will soon be here when they must be fed or they will starve and commit depredations. To divide the supplies of flour and beef furnished for the year, viz, 100,000 pounds of the former and 180,000 pounds of the latter, into fifty-two parts would allow but about one pound of flour and two pounds of beef, gross, *per week* to each person. While there was plenty of game this could be made to do, but now I am confronted with a problem which it is almost impossible for me to solve; and unless some assistance is rendered in time, I fear the question of whether it is cheaper to feed or to fight Indians will have another test. If the Government expects ever to make this people self-sustaining, it must furnish means to start them in the right way, viz: by supplying their wants for the present, and assisting them, by irrigation, &c., to live by farming in the near future.

Efforts have been made to establish agency herds for these Indians, but with very poor success, as they cannot be prevented from killing the cattle when driven to do so by hunger.

In view of the foregoing, I would recommend that the early attention of Congress be called to the condition of the Indians at the three agencies mentioned, that such steps as may be considered proper and necessary towards assisting them may be taken at as early a day as practicable.

CROW INDIANS OF MONTANA.

By the agreement entered into with the United States June 12, 1880, ratified by act of Congress April 11, 1882 (Pamph. Stat. at Large, 1881–'82, page 42), the Crow Indians, for certain valuable considerations, ceded to the United States 2,427 square miles, or 1,553,280 acres, of the western portion of the reservation set apart for them by the treaty of May 7, 1868, leaving the present existing reservation of 7,364 square miles, or 4,713,000 acres, intact for their use and occupation. The act of Congress referred to provided for a survey of the reduced reservation and for the allotment in severalty to the Crow Indians of lands thereon.

The population of the Crows is estimated at about 3,500. From the best information obtainable much of the land included within the present reservation is unfit for farming purposes, and it is believed that a further reduction could be made on the west and north sides thereof with advantage to the Government and without serious detriment to the Indians. I have not sufficient data before me to suggest any definite boundaries; but if sufficient farming and grazing land can be obtained to satisfy the purposes of said act within a tract of country, in compact form, watered by the Big Horn and its tributaries below Fort Custer, I should be disposed to recommend the consolidation of the Indians thereon and the opening up of the residue to public settlement, subject, of course, to proper negotiations with the Crows under the authority of Congress.

Houses are now being contructed in the valleys of the Big Horn and Little Big Horn for the use of these Indians, with a view of removing the agency and the Indians to these localities.

NORTHERN CHEYENNES IN THE TONGUE RIVER VALLEY, MONTANA TERRITORY.

In consequence of representations having been made to the office, that numbers of these Indians had located in the Tongue River Valley and vicinity, and allegations having been made by cattlemen that they were killing stock and otherwise molesting them, Special Agent Milburn was instructed, in February last, to visit the locality and ascertain the condition and wants of these Indians, and the truth of the complaints made against them. On the 18th of April last he submitted his report, from which it appeared that the complaints of the cattlemen were not well founded, and that while some of the Indians had made little or no progress, others were doing well and ought to be encouraged in their efforts to take homesteads and become self-supporting. The military authorities at Fort Keogh also reported that these Indians were deserving of assistance and should be allowed to remain.

In view of these reports I recommended that a special agent be appointed to take charge of the Indians temporarily and distribute to them such supplies as they are entitled to receive, which recommendation was approved by you.

Some of the Indians in the vicinity of the Tongue River were for a time held under the surveillance of the military at Fort Keogh and during that time were considered prisoners of war. A number of the Indians now there are a portion of Little Chief's band from Pine Ridge, Dakota. It is hoped that their efforts at settlement upon homesteads will prove successful, and to this end they should receive all the assistance which it is in the power of the Department to render.

SALE OF OMAHA LANDS IN NEBRASKA, AND ALLOTMENT OF LANDS IN SEVERALTY TO OMAHA INDIANS.

Under authority of the act of Congress approved August 7, 1882 (22 Stat., 341), all that portion of the Omaha Indian reservation in the State of Nebraska lying west of the right of way of the Sioux City and Nebraska Railroad Company is to be appraised and sold for the benefit of the Indians of said reservation. A commission, composed of Messrs. J. B. Detwiler, Daniel Duggan, and Henry Fontenelle, of Nebraska, has been appointed to make the required appraisement, and these gentle-

men are now engaged in that duty. The quantity of land to be appraised and sold is estimated to be about 50,000 acres. It is said to be of most excellent quality, both for agriculture and stock purposes, and the indications are that it will command a good price. The funds arising from the sale, after paying the expenses incident thereto, are to be placed to the credit of the Indians, the income therefrom, at 5 per centum, to be expended for their benefit, under direction of the Secretary of the Interior.

Under the same act (section 5) the lands lying east of the railroad right of way are to be allotted in severalty to the Indians of said reservation, in quantity as therein provided, and in carrying out this wise purpose Miss Alice C. Fletcher, of New York (who has shown a deep interest in the welfare of the Omahas, and through whose instrumentality, very largely, the legislation authorizing the allotments with permanent titles thereto was secured), was designated by the Department to make the allotments, and appointed a special agent of this Bureau for that purpose. Miss Fletcher received her instructions under date of April 21 last, and already some 500 allotments have been made. The Indians are eager to secure their allotments, and the work is progressing satisfactorily.

By a proviso to the eighth section of the act, any Indian who elects to do so may take his allotment west of the railroad right of way. It has been ascertained, however, that there are but ten who desire to go west of the railroad. Of course their selections will be withheld from sale.

The residue of lands east of the railroad, after all allotments have been made, are to be patented to the tribe in common, provision being made for allotments to children that may be born within a period of twenty-five years thereafter.

SALE OF THE OTOE AND MISSOURIA RESERVATION IN NEBRASKA AND KANSAS.

Agreeably with the provisions of the act of March 3, 1881 (21 Stat., 390), authorizing the appraisement and sale of the lands named in the above title, an appraisement of said lands was made during the latter part of last year, by Messrs. Wiggins, Ragsdale, and Barnes, commissioners of appraisal. The schedule of their appraisement was transmitted to this office under date of February 28, 1883, and, having been approved by the Department (April 17, 1883), the lands were offered for sale at public auction through the United States land-office at Beatrice, Nebr., on the 31st day of March last. The value of the lands as appraised ranged from $2.50 to $12 per acre, averaging something over $6 per acre. The total quantity appraised was 43,051.01 acres; total value, $267,323.41½. The proceeds of the sale are to be placed to the credit of the Otoes and Missourias who are now in the Indian Territory, and the interest thereon at 5 per centum is to be expended for their benefit.

The sale was conducted under the personal supervision of the Commissioner of the General Land Office; no official report thereof has yet been received by this office. It was understood that all the lands were sold, and that the prices obtained were greatly in advance of the value fixed by the appraisement, but the office has been informed indirectly that about one-half of the lands sold have been forfeited by reason of the failure of purchasers to comply with the terms of sale in respect of proof of settlement and cash payment. This, in connection with other information received, to my mind fully confirms the suspicion heretofore

entertained, that some at least of the purchasers who offered extravagant prices for the lands were not acting in good faith, but hoped by running the prices up to destroy the effect of the sale, and eventually, by some means or other, to secure the lands at their own prices. By this attempted sharp practice not only have *bona-fide* settlers been deprived of an opportunity to secure good lands at fair prices, but no little additional expense is likely to be incurred.

SETTLERS ON THE DUCK VALLEY RESERVATION.

On the 1st of April, 1880, a draft of a bill was prepared for the relief of certain settlers on the Duck Valley Reservation, in Nevada. These parties had settled and made improvements upon certain lands embraced in this reservation prior to the date of the executive order setting them apart for Indian purposes. Although the lands were unsurveyed, this office recognized the fact that an equitable claim would have existed for the value of the improvements, had the same been appraised, and urged the passage of the bill providing for their payment. Congress failed to take favorable action upon the bill, and, these settlers proving a source of annoyance to the Indians, were, with the assistance of the military, forcibly removed from the reservation during the month of April last. These parties have made valuable improvements upon lands which, although unsurveyed, were open to settlement. Of these improvements they have been deprived on account of the exigencies of the Indian service, and justice and fair dealing demand that they should be paid therefor. The attention of Congress should again be called to this matter.

MESCALERO APACHE RESERVATION IN NEW MEXICO—CHANGE OF BOUNDARIES.

Some important changes have been made in the boundaries of the Mescalero Reservation. A large strip, equal in extent to at least eight townships, has been segregated on the north and another smaller strip on the southwest, while an addition equal to about five townships has been made on the east. (See Executive orders dated May 19, 1882, and March 24, 1883.) These changes were much needed, owing to the existence of protracted dispute regarding the true location of the western boundary of the reservation, in the vicinity of the rich and populous Nogal mining district, and in order to rid the service of the annoyance caused by the presence of white settlers, who, by reason of prior settlement, had been suffered to remain upon the reservation after its withdrawal for Indian purposes.

Through the courtesy of the War Department the new outboundaries have been surveyed and marked upon the ground.

REMOVAL OF JICARILLA APACHES TO MESCALERO AGENCY.

For the last year the Mescalero and Jicarilla Agencies, the former in Southern and the latter in Northern New Mexico, about 500 miles apart, have been under one agent. Under an act of the last Congress, authorizing consolidation of agencies and removal of Indians, a consolidation of these two agencies was effected by removing the Jicarillas to the Mescalero Agency. The removal began under the personal supervision of Agent Llewellyn, on the 20th of August last. At San José the smallpox broke out among the Indians, which resulted in the death of six of

their number during the march to Fort Sumner. The total distance traveled by the tribe from Amargo to their present location was 502 miles, and forty-seven days were required for the trip. It appears from what the agent reports, that the majority of the Jicarillas are pleased with the change of location, but that Chief Huarito and his band, who objected to the removal from the start, are still discontented and dissatisfied.

The Jicarillas as a tribe are of a wandering restless disposition, and greatly addicted to the use of intoxicating liquors, and considerable trouble is apprehended in keeping them within the bounds of the reservation, but it is hoped that the good example of the Mescaleros, who are now a temperance people, will aid in bringing about a better condition of affairs.

CENSUS OF EASTERN CHEROKEES.

Reference was made in my last report to the appointment of Mr. Joseph G. Hester, of this city, to take the census and to make a new roll of all the Cherokee Indians residing east of the Mississippi River. Mr. Hester is still engaged in this duty, although the appropriation made in the sundry civil appropriation act of August 7, 1882, has long since been exhausted. Mr. Hester shows a commendable spirit in his determination to furnish the Department a census that will be of some practical value and as nearly complete in all its details as possible, trusting to the liberality of Congress to reimburse him for the outlay and expense incident to such prolonged and complicated work.

SETTLEMENT OF DIFFERENCES IN THE CHEROKEE NATION.

Referring to my last Annual Report on this subject, which mentioned the appointment of Courtland C. Clements, esq., of Richmond, Ind., special agent to make the investigation authorized by an item in the sundry civil appropriation act of August 7, 1882, I have the honor to report that Mr. Clements made the investigation, and his report upon Eastern and Western Cherokee differences was duly submitted to Congress on the eighth of February, 1883, and printed in House Ex. Doc. No. 79, Forty-seventh Congress, second session. Mr. Clements' other reports upon "Old Settler" and other Cherokee questions are printed in Senate Ex. Docs. Nos. 17 and 60 of the same session. No further action was taken by Congress on these reports.

By the deficiency appropriation act of March 3, 1883, the Eastern Band of Cherokee Indians was authorized to institute a suit in the Court of Claims against the United States—

> To determine the rights of the said band in and to the moneys, stocks, and bonds held by the United States in trust for the Cherokee Indians, arising out of the sales of lands lying west of the Mississippi River, and also in a certain other fund, commonly called the permanent annuity fund, to which suit the Cherokee Nation, commonly called the Cherokee Nation west, should be made a party defendant.

The case is now pending in the Court of Claims.

UMATILLA RESERVATION.

Bills were introduced in the last Congress (S. 1434, H. R. 2579) providing for the allotment of lands in severalty to the Indians residing upon the Umatilla Reservation in Northeastern Oregon, for the

granting of patents therefor, and for the sale of the remainder of the reservation in excess of 120,000 acres, the proceeds to be used for the benefit of the Indians, in assisting them to establish themselves upon their several allotments, and in the establishment and support of an industrial farm and school for the training and education of the children in the arts and methods of civilized life. Although the bill introduced in the Senate passed that body on April 24, 1882,* it failed to become a law.

A large majority of these Indians have expressed a strong desire to take lands in severalty; they have more land than they need for that purpose, or for their wants in their present situation, so that the sale of a portion of their reservation would furnish them the means necessary to a fair start upon their several allotments. It is to be hoped, therefore, that the effort to secure legislation looking to that end will be renewed at the next session of Congress.

The reservation, which was established by treaty of June 9, 1855 (12 Stat., 945), contains 268,800 acres, or 420 square miles, 150,000 acres of which is tillable. The number of Indians residing upon the reservation, as shown by the report of the agent for the present year, is 897; males, 398; females, 499.

TOWN OF PENDLETON, OREG.

By section 5 of the act of August 5, 1882 (22 Stat., 297), Congress appropriated $1,500 to enable the Secretary of the Interior to dispose of certain lands adjacent to the town of Pendleton, in the State of Oregon, belonging to the Umatilla Indian Reservation, in order to afford said town proper and needful extension and growth. By act of March 3, 1883 (*Ib.*, p. 590), Congress appropriated an additional sum of $2,000 for the survey and appraisement of said lands, making a total of $3,500 appropriated for that purpose. Directions were given by the General Land Office, in the latter part of March last, for the execution of the necessary surveys, and a commission, composed of Messrs. N. A. Cornoyer, J. H. Koontz, and J. H. Kenzie, of Umatilla County, Oregon, appointed by the Department, were instructed by this office to make the required appraisement. So far no report has been received of the progress of the work. Upon the return of the survey and appraisement, if the same shall be approved by the Department, the lands are to be sold at public auction at the door of the court-house in the town of Pendleton, aforesaid, after thirty days' public notice thereof. Only 640 acres can be sold under the provisions of the act aforesaid.

The funds arising from the sale of the lands, after deducting the expenses of the survey, appraisement, and sale, are to be placed to the credit of the Indians, bearing interest at the rate of 5 per centum per annum, and the Secretary of the Interior is authorized to expend from time to time so much of the principal and accrued interest as he may see fit in the support of an industrial school for the Indians of the Umatilla Reservation.

MALHEUR RESERVATION.

Under date of May 17 last, I submitted to the Department the question of restoring the remainder of the Malheur Indian Reservation, in the State of Oregon, to the mass of the public domain. It was stated that

* See Cong. Rec. vol. 13, part 4, pp. 3210, 3212, 3248.

the reservation was no longer needed for purposes of Indian occupation; that it was an expense to the Government, in that it had been found necessary to keep a person constantly employed in the protection of the Government buildings there, and that it was very doubtful if Congress would grant authority for the sale of any portion of the reservation for the benefit of the Indians, who have persistently refused to settle thereon. As the result of this step, the remainder of the reservation (except 320 acres, upon which the buildings belonging to the Old Camp Harney Military Reserve are situated) was restored to the public domain by Executive order, dated May 21, 1883. Under the provision of law contained in sections 2122 and 2123 of the Revised Statutes, on May 23 following the General Land Office was directed to sell the agency buildings, together with two sections of land upon which the same are situated, and this office is advised that the proper steps have been taken to effect the sale as directed.

There have been no Indians upon the Malheur Reservation since the outbreak of the Bannack war in June, 1878. All the Indians then belonging to the agency left the reservation, and at the close of said war those who had taken part in the hostilities, together with many other Indians who belonged at Malheur, were removed, with their women and children, to the Yakama agency, in Washington Territory, where they are permanently settled. Those who did not go to the Yakama are living in the vicinity of Camps McDermott, in Nevada, and Bidwell, in California, near the Oregon line, and the town of Winnemucca, in Nevada, where they procure a livelihood by cultivating the soil or laboring among the whites.

UTES.

By a clause in the Indian appropriation act approved March 1, 1883 (22 Stat., 440), the Ute Commission, appointed under the act of June 15, 1880 (21 Stat., 200), was abolished, to take effect March 15, 1883. At the same time, however, provision was made for continuing the work heretofore performed by said Commission, and a special agent of the Department is now engaged thereat, having taken up the work where the Commission left off. A large irrigating ditch has been in process of construction during the summer on the Uncompahgre Reservation, and the surveys necessary to the allotment of lands in severalty, as provided in the agreement, have also been in progress, and are now very nearly completed. The surveys for the Southern Utes have been made and returned in full to the General Land Office, and paid for by this office.

I had the honor to recommend, in report to the Department dated January 5 last, that the Ute removal and settlement fund of $350,000 (section 9, act June 15, 1880) be reimbursed certain sums of money taken therefrom to pay the cost of the surveys made on Grand River, in Colorado, and to pay for the value of improvements of white settlers found within the present Uncompahgre Reservation in Utah. The facts in the case are substantially as follows:

By the agreement made with the Confederated Bands of Utes, accepted and ratified by the act of June 15, 1880 (21 Stat., 199), it was agreed that the Uncompahgres should remove to and settle upon agricultural lands on Grand River, near the mouth of the Gunnison River, in Colorado, if a sufficient quantity of agricultural land could be found

there; if not, then upon such other unoccupied agricultural lands as might be found in that vicinity and in the Territory of Utah.

It was supposed at the time that the country in the neighborhood of the confluence of the Grand and Gunnison Rivers would afford a sufficient quantity of agricultural lands for the settlement of the Uncompahgres in accordance with the terms of the agreement, and as a necessary step to their removal and settlement there, a contract was entered into for surveying the agricultural lands in that locality. Surveys had been made amounting to $21,575.35, when it was ascertained that a sufficient quantity of agricultural lands could not be found there; whereupon the surveys were discontinued, and instead of settling the Indians there, they were removed to Utah Territory, as provided in the agreement. The Indians were in no wise benefited by these surveys, and they ought not to bear the expense incurred in making them. Had they been settled there, the cost of the necessary surveys would very properly come out of the removal fund, and it was of course in anticipation of their being settled there that the contract for the survey was entered into. As it is, the Indians derived no benefit from the work done, and yet the cost has been paid out of their removal and settlement fund.

Again, under the agreement it was incumbent upon the Government, in selecting lands *in Utah* (having failed to find suitable lands in Colorado), to find "unoccupied" agricultural lands for the settlement of the Uncompahgres. Within the territory finally selected and set apart for them in Utah some white settlers were found, having improvements of considerable value. In settlement of the claims of these settlers the Ute Commission appraised the value of their improvements and allowed the sum of $10,338.25, which has been set aside and ordered to be paid out of the removal and settlement fund. Manifestly, the Indians should bear no part of this expense, as the Government was bound to provide for them unoccupied lands. Their funds should, therefore, be reimbursed in that amount.

I earnestly recommend, in view of the foregoing, that Congress be asked, at its next session, to appropriate $31,913.60 in reimbursement of the amount thus taken from the removal and settlement fund of $350,000.

I would add that the surveys in Colorado of which I have spoken, although of no benefit to the Indians, will undoubtedly be useful to the Government, as just that much of the public lands has been surveyed, and the work will not, it is presumed, have to be done over again.

By the act of March 1, above quoted, the Secretary of the Interior is authorized, with the consent of the Indians, to pay in stock and such other property as he and the Indians may agree upon, instead of cash, the annual $50,000 per capita payment provided by the agreement incorporated in act of June 15, 1880.

MOSES.

In consequence of numerous representations having been made that the northern portion of the Columbia Reservation in Washington Territory contained valuable mines, which had been discovered and worked previous to the issuance of the Executive order of Arpril 19, 1879, setting apart that reserve, the Department, on October 11, 1882, directed Inspector Gardner to investigate the matter, and also the location and requirements of the Indians for whose benefit the reservation was created. As the result of this investigation an Executive order was issued February 23, 1883, restoring to the public domain a strip of

country 15 miles in width along the entire northern portion of the reservation.

In April last the commanding general of the Department of the Columbia represented that this action had occasioned much excitement among the followers of Chief Moses, and that their disposition was much more hostile than friendly, and requested authority to send Moses, with an officer and interpreter, to Washington in order that such action might be taken as would restore peaceful relations between all concerned.

Accordingly Moses and Sar-sarp-kin, of the Columbia Reservation, and Tonasket and Lot, of the Colville Reservation, under the charge of Capt. F. D. Baldwin, Fifth United States Infantry, visited Washington in July last, and entered into an agreement, the following memorandum of which was signed by them and by the Secretary of the Interior and Commissioner of Indian Affairs on the 7th of July last:

In the conference with Chief Moses and Sar-sarp-kin, of the Columbia Reservation, and Tonaskat and Lot, of the Colville Reservation, had this day, the following was substantially what was asked for by the Indians:

Tonasket asked for a saw and grist mill, a boarding school to be established at Buonaparte Creek to accommodate one hundred (100) pupils, and a physician to reside with them, and one hundred ($100) dollars to himself each year.

Sar-sarp-kin asked to be allowed to remain on the Columbia Reservation with his people, where they now live, and to be protected in their rights as settlers, and in addition to the ground they now have under cultivation within the limit of the fifteen mile strip cut off from the northern portion of the Columbia Reservation, to be allowed to select enough more unoccupied land in severalty to make a total to Sar-sarp-kin of four square miles, being 2,560 acres of land, and each head of a family or male adult one square mile; or to move on to the Colville Reservation, if they so desire, and in case they so remove and relinquish all their claims on the Columbia Reservation, he is to receive one hundred (100) head of cows for himself and people, and such farming implements as may be necessary.

All of which the Secretary agrees they should have, and that he will ask Congress to make an appropriation to enable him to perform.

The Secretary also agrees to ask Congress to make an appropriation to enable him to purchase for Chief Moses a sufficient number of cows to furnish each one of his band with two cows; also to give Moses one thousand ($1,000) dollars for the purpose of erecting a dwelling house for himself; also to erect a building and maintain a school therein; also to construct a saw-mill and grist-mill as soon as the same shall be required for use; also that each head of a family or male adult person shall be furnished with one wagon, one double set of harness, one grain cradle, one plow, one harrow, one scythe, one hoe, and such other agricultural implements as may be necessary.

And on condition that Chief Moses and his people keep this agreement faithfully, he is to be paid in cash, in addition to all of the above, one thousand ($1,000) dollars per annum during his life.

All this on condition that Chief Moses shall remove to the Colville Reservation and relinquish all claim upon the Government for any land situate elsewhere.

Further, that the Government will secure to Chief Moses and his people, as well as to all other Indians who may go on to the Colville Reservation, and engage in farming, equal rights and protection alike with all other Indians now on the Colville Reservation, and will afford him any assistance necessary to enable him to carry out the terms of this agreement on the part of himself and his people. That until he and his people are located permanently on the Colville Reservation his status shall remain as now, and the police over his people shall be vested in the military, and all money or other articles to be furnished him and his people shall be sent to some point in the locality of his people, there to be distributed as provided. All other Indians now living on the Columbia Reservation shall be entitled to 640 acres, or one square mile of land, to each head of family or male adult, in the possession and ownership of which they shall be guaranteed and protected. Or should they move on to the Colville Reservation within two years, they will be provided with such farming implements as may be required, provided they surrender all rights to the Columbia Reservation.

All of the foregoing is upon the condition that Congress will make an appropriation of funds necessary to accomplish the foregoing, and confirm this agreement; and also, with the understanding that Chief Moses or any of the Indians heretofore

mentioned shall not be required to remove to the Colville Reservation until Congress does make such appropriation, &c.

H. M. TELLER,
Secretary of the Interior.

his
GEORGE X HERRING, *Interpreter for the Indians.*
mark

H. PRICE,
Commissioner Indian Affairs.

MOSES, his X mark.
TONASKET, his X mark.
SAR-SARP-KIN, his X mark.

J. F. SHERWOOD,
Interpreter for the Government.
FRANK D. BALDWIN,
Captain Fifth Infantry.

This agreement, if ratified by Congress, will restore to the public domain some 2,243,040 acres, in addition to the 749,200 acres restored by the Executive order of February 23, 1883, upon terms favorable to the Government, and for the best interests of the Indians themselves.

ENOCH SILIQUOWYA AND THE NORTHERN PACIFIC RAILWAY COMPANY.

This Indian, with others of the Spokanes, settled upon and improved lands in Washington Territory outside of any reservation, which were found to be within the grant to the Northern Pacific Railway Company. The company, desiring these lands, offered to pay Enoch the sum of $1,000 for his improvements, notwithstanding the fact that he had no valid title. Although this sum was probably the full value of the improvements, I urged upon the company the propriety and good policy of paying him a sum which would fully compensate him for the loss of the land as well as the improvements. The company, in compliance with this request, thereupon paid him the sum of $2,000, and then permitted him to remove such improvements as he desired. This instance of just and liberal dealing with the Indians on the part of this corporation I deem worthy of note, and commend it as an example to other corporations and individuals.

I have the honor to be, sir, very respectfully, your obedient servant,

H. PRICE,
Commissioner.

The Hon. SECRETARY OF THE INTERIOR.

REPORT OF THE COMMISSIONER OF PATENTS.

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
Washington, D. C., September 14, 1883.

SIR: I have the honor to submit the following report of the business of this office for the fiscal year ending June 30, 1883:

Number of applications for patents received	32,845
Number of applications for design patents received	1,039
Number of applications for reissue patents received	247
Number of applications for registration of trade-marks	854
Number of applications for registration of labels	749
Total	35,734
Number of caveats filed	2,086

Number of patents granted, including reissues and designs	21,185
Number of trade-marks registered	883
Number of labels registered	618
Total	22,686
Number of patents withheld for non-payment of final fees	2,056
Number of patents expired	7,471

RECEIPTS AND EXPENDITURES.

Receipts from all sources	$1,095,884 70
Expenditures (not including printing)	704,348 45
Surplus	391,536 25

COMPARATIVE STATEMENT SHOWING THE INCREASE IN THE WORK.

Number of applications for patents, including reissues, designs, trade-marks, and labels, received during the—	
Fiscal year ending June 30, 1881	24,906
Fiscal year ending June 30, 1882	30,062
Fiscal year ending June 30, 1883	35,734
Increase 1883 over 1881	10,828
Increase 1883 over 1882	5,672
Number of applications awaiting action on the part of the office—	
On July 1, 1882	3,387
On July 1, 1883	4,699
Increase, 39 per cent., or	1,312

Assignments recorded and words written.

	Fiscal year ending June 30, 1882.	Fiscal year ending June 30, 1883.	Increase.
Assignments recorded	16,514	17,087	573
Words written in recording assignments and making manuscript copies	20,945,386	21,340,713	395,328

COMPARATIVE STATEMENT SHOWING THE INCREASE IN RECEIPTS.

Fiscal year ending June 30, 1881	$789,895 52
Fiscal year ending June 30, 1882	930,864 14
Fiscal year ending June 30, 1883	1,095,884 70
Increase 1883 over 1881	305,989 18
Increase 1883 over 1882	165,020 56

The foregoing tabulated statement shows that the business of this office is steadily and rapidly increasing. This increase is not confined to any particular branch of the work, although some classes of inventions are more active than others, but is found in each of the divisions of the office. Every industrial pursuit which finds its reflex here vies with every other in seeking the best and most economical means and methods for accomplishing successful results. The field of invention seems to enlarge with the increasing demands and wants of the people and the necessities of labor and capital. Whenever it is found that the use of old devices and appliances is not profitable, because of the competitions of trade or of labor, the inventive mind finds new ways and means for accomplishing the same or like results at less cost and with equal satisfaction. Improved devices and methods supplant old ones, making that which was difficult easy, and that which was expensive cheap. The sum of human knowledge is thus being constantly augmented, the

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... the different classes of inventions.
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homestead claimants under the laws providing for the sale and disposal of the public lands of the United States; but what reason exists why those claims should be settled and ample provision made therefor, and force refused to settle the claims or rights of persons presented before this office, is not understood.

I have learned, with great satisfaction, that the inventors and manufacturers throughout the country will soon take steps to impress upon those who have hitherto treated their rights with some indifference the importance of having a sufficient force in this Bureau, as well as other appliances and accommodations, to fairly and promptly act upon their applications and determine their rights to the inventions claimed by them. It is believed by most of them that their votes are of quite as much importance and their support to the Government fully as necessary as pensioners and settlers upon the public lands, to whom not too great liberality has been shown.

At the proper time I shall submit estimates for an increase in the force required by the office and my reasons in full therefor.

ROOM.

Without any increase in the force, additional room for the accommodation of those now employed is absolutely necessary. I have heretofore stated my views on this subject to you and given an estimate of the number of additional rooms (30) which are required. With an increase in the force, which must necessarily be made, additional room to that heretofore estimated for must be provided.

INCREASE IN SALARIES.

I desire also to invite attention to the fact that a very large number of examiners and assistant examiners have resigned their positions in this office during the last year. Most of these persons have resigned for the purpose of entering into practice before the office. The reason of these resignations is found in the fact that insufficient salaries were paid them by the Government. I have heretofore recommended an increase in the salaries of the examiners and assistant examiners, and urged appropriation therefor, but without avail. Finding no hope for a proper remuneration of their services while in the office, those men have voluntarily severed their connection therewith for the purpose of securing such remuneration elsewhere. The office is thus made to suffer the loss of experienced men, skilled in particular arts and acquainted with its business, and feels such loss, perhaps, more than any other Bureau of the Government. While it is true that other men equally brilliant, and who in time will be equally efficient, can be obtained for the salaries now paid, the work of the office is greatly delayed by the changes, because years will be required before the same skill and knowledge can be acquired by new appointees. It is not true, as sometimes said, that larger salaries would not secure the retention of such men. Undoubtedly, whatever salaries were paid, some would resign, preferring to be masters of their own destinies rather than subordinates in any sense. This, however, would not be the general rule, but the exception.

The same reasons, substantially, which require an increase in the force of the office in order that the work may be promptly and efficiently done, exist for urging proper salaries to secure the most efficient men to do this class of work. Inventors, manufacturers, and others interested in rights secured by patents for inventions are entitled to have perform the work committed to the office intelligently and efficient

If it were true that larger fees would be necessary in order to make the office self-supporting by the employment of such men, the persons who pay the expenses of the office would not hesitate to pay the increased fees. Money is well expended by an applicant when he is shown by the state of the art that he is not entitled to a patent, although he asks for one, because, where he is not entitled, if a patent is granted he is simply exposed to expensive litigation if he uses the invention claimed.

NECESSARY LEGISLATION.

During the October term of the supreme court of the District of Columbia that court, in *Ex parte von Hofner-Alteneck* (23 O. G., 269), decided that the Commissioner of Patents under existing statutes had the authority to institute a proceeding to determine the question of public use or sale of an invention where such use or sale was shown *prima facie*. In contested cases it is possible that little difficulty will be experienced in giving force and effect to said decision in the practice of the office, because an active and interested opponent will be ready to furnish the means to prosecute to final determination the issue which he has made. In *ex parte* cases, however, and where there is not an active and interested opponent to the issuance of a patent, but simply an informant of facts which tend to show that the invention has been in public use or on sale more than two years prior to filing the application, there is no provision of law which authorizes the Commissioner of Patents to institute such a proceeding or to make any inquiry beyond the information possessed by the employés of the office, to determine whether the invention has been in public use or on sale as alleged. Authority should be conferred upon the Commissioner and means furnished him with which to prosecute such inquiries where he has good reason to believe a proper case exists. The aid of the courts, as in interference cases to parties, should be given to the Commissioner to compel the attendance of witnesses in such cases.

Repeated attention has been called to the necessity for an amendment of section 4887 of the Revised Statutes, providing that where the invention claimed has been first patented in a foreign country or countries the patent when issued by this office shall be so limited as to expire with the foreign patent, and if there be more than one, with the one having the shortest term to run. Recent decisions of the courts have been made to the effect that if patents are not limited, as required by said section, the patent issued by this office is void. When it appears that the invention has been patented in a foreign country, it is now the practice of the office to issue a patent for the full term of seventeen years, subject to the limitation prescribed by said section. Owing to the difference between the patent laws of foreign countries and our own, it is impossible to tell, when such a limitation is made, exactly how long the term of the patent will be. If the foreign patent is kept alive during the entire time for which a patent can be granted by any foreign country, then the term of the patent issued by this office can be fixed; but if, for any of the reasons provided by the laws of foreign countries, the foreign patent expires—viz, for the non-payment of annual or periodical dues, or failure to put or keep the invention in use—it is doubtful whether the patent issued by this office would have further force and effect. Such uncertainty should be removed, either by granting the patent for a definite term where the invention has first been patented in a foreign country or countries, without any conditions subsequent, or by granting it for the full term of seventeen

years from the date of the earliest foreign patent. If patents are to be granted at all where the inventions have been first patented in a foreign country, the rights of parties under such patents should be rendered certain, and this can only be done by proper amendment of existing laws.

Under the present laws the Official Gazette and copies of the specification and drawings of each patent issued by this office are furnished to each of the United States courts. Some of the decisions made by said courts are furnished to this office for publication in the Official Gazette, but not all, and those furnished are not received with any degree of regularity. In order that the Official Gazette may be what it should be—a medium for conveying to the public not only every new and patented invention, but all information affecting patents and the rights of parties thereunder—the decisions of the United States courts involving the validity or invalidity of patents should be published therein, at least all those which involve other than mere questions of fact. There is no statute at present which directs that such decisions shall be furnished to this office, and hence only such are furnished as the presiding judges direct to be sent or the parties in interest furnish at their own expense. Undoubtedly there would be greater uniformity in the decisions of the courts if all their decisions were promptly published in a manner which would secure extensive circulation. Such publication would be provided if the decisions were promptly furnished to this office. Inasmuch as the office furnishes to the courts all of its publications, I think it but reasonable that the courts should furnish to the office their decisions. By so doing the office will be informed as to what patents are considered valid or invalid by the tribunals which must finally determine those questions, and the issuance of invalid patents would be largely prevented. Such decisions will not be furnished unless the law expressly provides therefor.

I have invited your attention to the foregoing subjects requiring additional legislation in order that, if the suggestions meet your approval, such legislation may be recommended by you as may be necessary to remedy the defects in our law as have been pointed out.

Very respectfully, your obedient servant,

E. M. MARBLE,
Commissioner.

Hon. H. M. TELLER,
Secretary of the Interior.

REPORT OF THE SUPERINTENDENT OF THE CENSUS.

DEPARTMENT OF THE INTERIOR,
CENSUS OFFICE,
Washington, D. C., September 15, 1883.

SIR: I have the honor to present the annual report of the operations of this bureau.

The condition of the work in completion of the Tenth Census has suffered unexpected delays, arising from the magnitude and variety of the investigations undertaken.

The compendium was published in February of this year in two octavo volumes, aggregating 1,845 pages, and comprising every class of statistics to be embraced in the full reports of the Census, except those relating to churches, libraries, and schools.

A great deal has been done toward preparing the large quarto reports for publication, though not so much as was anticipated at the date of my last report. There were then reported 1,951 pages as stereotyped. The number of stereotyped pages is now 8,686, and 544 pages more are in type.

The population volume is entirely printed, and is now binding. It comprises 1,050 pages, with 41 colored maps, and large numbers of maps and charts in black.

Printing is now in progress on the volume of manufactures, and the maps to illustrate this volume are promised during the present month.

The volume on agriculture is only detained by the delay in engraving and printing the maps which exhibit the range of cultivation of the several crops.

A large number of comprehensive and valuable special reports are completely finished, and some of them are in the hands of the Public Printer, who has dealt with the difficulties incident to so vast a work with great zeal, energy, and courtesy toward this department.

The clerical force of the Census Office has been largely reduced in consequence of the approach of the work toward completion.

I am, sir, very respectfully, your obedient servant,

C. W. SEATON,
Superintendent of Census.

Hon. H. M. TELLER,
Secretary of the Interior.

REPORT OF THE ARCHITECT OF THE UNITED STATES CAPITOL.

OFFICE OF ARCHITECT UNITED STATES CAPITOL,
Washington, D. C., July 1, 1883.

SIR: Relating to the operations of this office for the fiscal year ending June 30, 1883, I have the honor to submit the following report:

THE CAPITOL.

As provided by the act approved August 7, 1882, two rooms have been constructed in the crypt, and by the act of March 3, 1883, two additional ones for the accommodation of the Library of Congress.

The post-office room of the House of Representatives has been rearranged so as to afford an increased number of boxes and additional facilities for the handling of mail matter.

The rooms first mentioned have been properly shelved and in connection with them a large portion of the story beneath has been assigned, walled off, and shelved for the storage of newspaper-files, maps, charts, and other copyright matter coming in rolls. Drawers and racks have also been provided to receive the charts and rolls.

At the Senate wing a sidewalk lift has been put in for the convenience of getting documents from the Public Printing Office into the sub-basement. A freight-lift is being put in at the north end of the western corridor of the same wing to facilitate the distribution of documents from the folding-room to the various committee rooms, and for ordinary freight purposes.

Nearly the whole exterior of the central portion of the building, together with the dome, have been painted, and all will be before the meeting of Congress.

Considerable progress has been made in fire-proofing the space over the colonnade at the south end of the old Hall of Representatives. The timber partition formerly over this colonnade has been taken out and a brick wall put in its place, and the room thus made has been ceiled by means of brick arches supported by iron beams. An arrangement has been effected by which a communication is obtained with the House Documentary Library in the upper story of the corridor of the House wing—with the gallery of the old Hall of Representatives—and the rooms adjoining, in which books are stored connected with this Library. Book shelves have been placed in the gallery of the old Hall.

The premises formerly occupied and rented at the corner of New Jersey avenue and North B streets, and used as carpenter, smiths, and stone-cutter shops have been vacated, and these shops placed on the Government property at the corner of Delaware avenue and South B street.

The granite steps at the north arcade of the Senate wing and those at the south and western arcades of the House wing, which were built on foundations resting on the made earth which forms the terrace, have been taken down and reset. A large portion of the defective wooden flooring in that portion of the basement story of the old building used for storing documents of the House folding-room has been taken out and replaced by an asphaltic cement floor. Iron screens have been placed at the south end of the main corridor basement story to render these spaces available for working rooms, and the whole building, as a general thing, has been put in good order for the coming session.

Of the condition and working of the heating and ventilating apparatus of the House of Representatives Mr. William Lannan, chief engineer, in his report says:

The ventilation of the Hall has continued satisfactory, there being very few complaints, these only from persons of feeble health and susceptible to the slightest draughts. This was overcome, in part, where members complained, by closing off the air immediately in rear of their chairs.

The temperature of the Hall is under perfect control. The record of the registering thermometers show that in no case during the sessions of the last Congress did the temperature vary more than 2°, the highest being 71°, the lowest 69°.

The important averages taken from accurate observations for the last Congress were as follows:

Revolution of fan	per minute..	55
Volume of air carried to Hall by each revolution	cubic feet..	852
Volume of air carried to Hall per minute	do....	46,860
Volume of air carried to Hall per minute for each person	do....	64
Volume of air removed from Hall per minute for each person	do....	70
Average relative humidity	per cent..	46
Average daily attendance (about)		732

The above statement, so far as it relates to the supply and discharge of the air, is made from actual measurement. The attendance is not from actual enumeration, but estimated from observation each day.

The engines and machinery are in good condition, but the boilers will require considerable work to make them serviceable for the next winter. Four of these boilers have been in use ever since the first occupation of this wing of the building; although of superior construction and material, necessarily from long use they show many defects, which should be remedied during the present recess.

The flue sheets in boilers Nos. 2 and 3 have several cracks between the flues, and should be renewed. The flues in all four of the boilers have become so thin from service and frequent calking that they are no longer safe. In order to keep these boilers in running order during the past winter, we were obliged to have the services of a boiler-maker a great portion of the time.

In the repairs to these boilers, which I consider a necessity, I will state that the flues in the upper section are longer than those in the lower, consequently the defective ends of the long flues might be cut off, by which means they could be used for the lower section; new flues then would be required only for the upper section. New flue sheets will also be required for boilers Nos. 2 and 3.

As recommended in the above report, new flues and flue sheets for the boilers have been ordered, and it is the intention to have them thoroughly overhauled, strengthened and repaired during the present season.

At the Senate wing the main heating coils have been reconstructed, and so arranged that the temperature of the Senate chamber can be regulated much more readily than heretofore. Several of the coils for heating committee rooms have been reconstructed, so that the whole system of steam coils is now in good condition.

An effort has been made to further utilize the heat of the boilers by building brick return flues under them.

As relates to the electric lighting apparatus, Mr. A. B. Talcott, the electrician, House of Representatives, reports:

The alterations and improvements in the system of lighting the Hall, House of Representatives, suggested in my last report, were completed prior to the second session of the Forty-seventh Congress with extremely satisfactory results.

The stop-cock and switch-board were brought so closely together as to place them directly under the control of the operator, rendering any escape of gas, and possible danger therefrom through a disarrangement of the electrical apparatus at the instant of lighting, less liable to occur. I also placed a test bell and test switches on the wires, so that each of the fifty-odd circuits are tested each morning, and thus constantly kept in perfect order.

The entire system is now in perfect condition as to safety, economy, and reliability, and will probably require nothing beyond ordinary repairs until it is pushed away by a perfected electric light.

In the rotunda the wires connecting the burners had become uncovered and wholly unreliable; these have been taken out and new ones doubly insulated at the points of contact with the metal casings put in, which will last many years.

CAPITOL GROUNDS.

As relates to the improvement of these grounds, Mr. Frederick Law Olmsted, landscape architect, says in his annual report that—

During the last year the north terrace approach has been built, and Congress at its last session ordered the corresponding work on the south of the Capitol. In the debate of the question apprehensions appeared that the plan of the larger work, of which these approaches are initial steps, had not been maturely considered, and that its ultimate cost could be but vaguely conjectured. Directions were consequently given that Congress should be supplied at the coming session with detailed information upon the subject.

The plan of the terrace was prepared under a commission which I had the honor to receive from Congress in 1874. It was submitted the following year in the form of large drawings of every part. A detailed estimate of the cost was at the same time presented, accompanied by offers from builders of the highest standing to contract for the work at the prices named.

After prolonged consideration in joint committee, the proposition was adopted as a part of the general plan for the improvement of the Capitol grounds.

Since then the entire work of the terrace has been twice re-estimated in accordance with the market prices of the day. The last of these adjustments was made in 1882, and was based on the actual cost of the work then under contract upon the north terrace approach. The rate thus established made the cost of the terrace entire about five per cent. less than the estimate originally given to Congress.

Early in the last session this last estimate was laid before the Joint Committee on Public Buildings and Grounds, and at the time of the debate of the subject in the Senate was on file in your office. I do not know that it can yet be at all improved upon, and in order to meet the requirements of a detailed estimate to be presented at the opening of the next session, I will request, if you see no objection, that it may be printed precisely in its original form.

From the annual and occasional reports that I have prepared, and which have been printed for the information of Congress, in addition to the facts above stated, it will be apparent that if I have failed to take the measures necessary to secure consideration for the plans and estimates of the terrace it can have been only from reluctance to exhibit a zeal in the premises which might be thought to carry me beyond the proper lines of my professional duty.

I hope that the small section of the terrace that has now been built, though at a point where the least advantage of the work can be realized, will be found to sus-

tain, as far as it goes, the view of its value that I have at every suitable opportunity, in concurrence with you, sought to present.

It is respectfully urged that an appropriation may be made at the coming session for the construction of at least so much of the terrace as is required at the north and south of the building, namely, nineteen bays, including the piers, the estimated cost of which is one hundred and thirty-eight thousand seven hundred and seven dollars and thirty-three cents ($138,707.33).

EXTENSION TO COURT-HOUSE, DISTRICT OF COLUMBIA.

The extension to the court-house, Washington, D. C., authorized by act of Congress approved February 23, 1881, has been completed, and is now occupied by the courts and offices connected with the same. All the record rooms formerly in the old portion of the building have been moved to more secure quarters in the new. This work has been done for the amount appropriated, but owing to the expense of some of the permanent furniture, such as the judges' benches, stands and desks for clerk's room, having to be paid for out of the moneys appropriated for the building, no funds were left available for the making of terrace, putting in steps, and paving around the northern, eastern, and western fronts of the extension.

In the old portion of the court-house building several repairs and improvements have been made. The two court-rooms have been renovated, the walls and ceilings painted, and various changes made in the criminal court by putting in additional railing, &c. In the basement of this portion of the building several rooms have been fitted up for use of the office of the recorder of deeds and one for the register of wills; two rooms for the detention of prisoners.

The water-closets formerly in the rooms at the east and west end of the corridor have been taken out, and these rooms fitted up for business purposes, and the water-closets constructed in rooms in the central part of this story.

EXTENSION TO GOVERNMENT PRINTING OFFICE.

The work at Government Printing Office has been entirely completed, the cost kept within the amount appropriated.

COLUMBIA HOSPITAL FOR WOMEN AND LYING-IN ASYLUM.

As provided in act approved August 7, 1882, a new wing has been added at the west of the main building of the Columbia Hospital for Women and Lying-in Asylum, and it is now occupied.

BOTANIC GARDEN.

The mound over Tiber Creek has been cut down, to better conform to the surface of the grounds. The lawns and beds have been filled in with rich earth to bring them up to the grade of the walks. An asphaltic pavement, with stone edging, was placed around the fountain. A walk leading from main walk to the fountain has been improved in the same manner. A large amount of painting and glazing has been done, principally to the forcing-houses, both in the garden proper and the inclosure south of Maryland avenue. The iron fence around the garden has also been painted. Two new boilers were procured and put in, and the heating-pipes rearranged and repaired. Considerable new wooden shelving and staging has been put in to take the place of that decayed, and the iron portion of the dome of the conservatory has been lined with wood to prevent the conduction of cold through the iron roof, which has proven somewhat injurious to some of the plants which have grown to reach the roof.

Statement showing amounts expended from June 30, 1882, to June 30, 1883.

CAPITOL EXTENSION.

For amount of pay-rolls, laborers, mechanics, &c	$31,446 43	
For labor paid by voucher, not on rolls	674 97	
For painting material	2,868 09	
For plumbers and steam-fitting material	2,904 66	
For hardware and iron	1,647 02	
For lumber	1,875 04	
For marble and granite	189 01	
For freight and expressage	187 00	
For cleaning and repairing clocks	100 00	
For forage	128 50	
For stationery	64 00	
For silver and nickel plating	116 50	
For miscellaneous	281 67	
For glass	449 61	
For cement, lime, brick, &c	855 81	
For bell-hanging	13 50	
For iron railings	254 50	
For boiler-makers	326 76	
For ice	19 25	
For brushes, sponges, and soap	344 50	
For grate-bars and castings	1,803 79	
For tin file-cases	271 39	
For asphaltic pavement	78 00	
Amount available July 1, 1882	146 63	
		$47,046 63
Amount appropriated August 7, 1882	40,900 00	
Amount appropriated August 7, 1882, for construction of partitions and shelving for storing surplus books of the Library of Congress in crypt, west side	3,500 00	
Amount appropriated March 3, 1883, for same purpose on east side crypt	2,000 00	
Altering and increasing number of mail-boxes and repairs to House post-office—amount appropriated March 3, 1883	500 00	
Unexpended balance of July 1, 1882, turned in at United States Treasury	146 63	
		47,046 63

ELEVATORS AND STEAM MACHINERY, UNITED STATES SENATE WING.

Amount paid for elevator	$5,100 00	
Amount paid for steam-regulators, traps, &c	1,019 59	
Amount paid for repairs to steam-engine and pumps	1,122 91	
Amount paid for repairs to steam-boilers	814 73	
Amount paid for repairs to steam-coils and fittings	1,227 97	
Amount paid for grate-bars and castings	211 23	
Amount paid for steam-gauges and repairs to elevator-shaft	66 50	
Amount paid for granite and brick work	33 37	
Amount paid for painting engine-fronts, boilers, and pumps	202 37	
Amount of balance on hand July 1, 1883	701 23	
		$10,500 00
Amount appropriated August 7, 1883		10,500 00

CAPITOL GROUNDS.

Amount paid for pay-rolls, mechanics, &c	$30,759 54	
Amount paid for labor by voucher, not on rolls	56 50	
Amount paid for lime, sand, and cement	1,843 35	
Amount paid for bricks	65 00	
Amount paid for lumber	237 92	
Amount paid for brooms, brushes, and hardware	463 81	
Amount paid for granite and marble work, north approach	17,360 00	
Amount paid for black granite work, western grounds	7,532 22	
Amount paid for other granite and marble work	397 23	
Amount paid for artificial stone pavement	326 53	
Amount paid for services of draughtsman	1,187 69	
Amount paid for miscellaneous	260 01	

Amount paid for services of landscape architect	$2,000 00	
Amount paid for traveling expenses of landscape architect	227 08	
Amount paid for stationery	91 57	
Amount paid for plumbing material	229 74	
Amount paid for painting material	192 28	
Amount paid for soil, manure, and hauling	479 02	
Amount paid for rubble-stone	281 92	
Amount paid for trees, shrubs, and plants	1,007 90	
Amount available July 1, 1883	69	
		$65,000 00
Amount appropriated August 7, 1882		65,000 00

LIGHTING UNITED STATES CAPITOL AND GROUNDS.

Amount paid superintendent of meters, lamplighters	$4,566 52	
Amount paid for gas consumed	23,982 42	
Amount paid for electric bells, material, &c	507 02	
Amount paid for chandeliers and gas fixtures	735 80	
Amount paid for posts, lamps, and lanterns	146 23	
Amount paid for matches and candles	62 00	
Amount available July 1, 1883	01	
Unexpended balance of July 1, 1882, turned in at United States Treasury	436 84	
		$30,436 84
Amount available July 1, 1882		436 84
Amount appropriated August 7, 1882		30,000 00
		30,436 84

ENLARGING COURT-HOUSE, WASHINGTON, D. C.

For amount expended prior to July 1, 1881	$77,073 46	
For amount pay-rolls mechanics, laborers	10,678 90	
For amount plumbing material	2,661 19	
For amount rubble-stone work	120 13	
For amount cut-stone work	376 61	
For amount plastering	5,012 00	
For amount steam-heating apparatus	4,578 65	
For amount freight and hauling	174 07	
For amount painting material	992 04	
For amount bricks	451 61	
For amount hardware	1,543 45	
For amount asphaltic pavement	1,817 80	
For amount glass for windows	826 73	
For amount tin-roofing portico	54 11	
For amount galvanized-iron ceiling, portico	197 54	
For amount marble mantels	790 00	
For amount labor paid by voucher	2,798 66	
For amount lumber	5,984 40	
For amount cement, lime, sand, &c	868 65	
		$117,000 00
Amount appropriated February 23, 1881		117,000 00

EXTENSION OF GOVERNMENT PRINTING OFFICE.

For amount expended prior to July 1, 1882		$39,362 83
Paid for pay-rolls, mechanics, laborers, &c	$139 50	
Paid for labor not on rolls	136 00	
Paid for glass	15 40	
Paid for lumber	57 06	
Paid for plastering	31 50	
Paid for plumbing material	98 70	
Paid for painting material	149 01	
		637 17
Amount appropriated March 3, 1881		40,000 00

BOTANIC GARDEN.

For amount paid for pay-rolls, mechanics, laborers	$1,578 50	
For amount paid for heating apparatus and plumbing	780 76	
For amount paid for painting and material	1,653 91	
For amount paid for garden-soil and manure	1,178 61	
For amount paid for asphaltic pavement	966 58	
For amount paid for brick work and material	285 17	
For amount paid for lumber	275 56	
For amount paid for stone flagging	222 94	
For amount paid for cast and wrought-iron work	198 97	
		$7,150 00
Amount appropriated August 7, 1882		7,150 00

Very respectfully submitted.

EDWARD CLARK,
Architect, United States Capitol.

Hon. H. M. TELLER,
Secretary of the Interior.

REPORT ON THE RECONSTRUCTION OF THE INTERIOR DEPARTMENT BUILDING.

OFFICE OF ARCHITECTS AND ENGINEERS,
RECONSTRUCTION OF INTERIOR DEPARTMENT BUILDING,
Washington, D. C., October 23, 1883.

SIR: We have the honor to submit a report of operations pertaining to the reconstruction of the Interior Department building from April 12, 1883, the date of our appointment as architects and engineers thereof, to this date.

On April 13, we laid before you a set of drawings, illustrating the modifications of the general plans under which the north and west wings of the building were reconstructed and fire-proofed, such as were found necessary for adapting them to the work on the south wing and main portico. They were referred by you to Mr. Edward Clark, the Architect of the United States Capitol, returned by him with his approval, and in turn approved by yourselves on April 16. We recapitulate the modifications.

In the center of the south wing, at the head of the main stairs of the building, a fitting entrance-hall has been located. It leads to the four model-halls, of 1,062 feet in length and 62 feet in width. This entrance-hall is unobstructed, 40 by 62 feet in size, and 33 feet high from the floor to a paneled ceiling.

From the eastern and western sides of this hall to the termini of the wing office-rooms are arranged to both sides of a central corridor of 18 feet in width. These offices are 12 feet high, 22 feet wide, 450 feet long, and have ample light and ventilation. To this extent the area of the overcrowded rooms of the Patent Office will be increased.

The corridors are open up to the roof, while the offices have fire-proof flat-arched ceilings, which form the floors of model-halls, forming a first gallery. A second gallery of limited width is carried around the four inclosing walls of the wing. Approached from this second gallery there is an additional fire-proof hall constructed above the main portico on F street. It is about 96 by 32 feet in size, well lighted and ventilated by four large sky-lights, containing 144 square feet.

The roof of the model-halls is supported by fire-proofed sectional wrought-iron columns. All exposed iron work is thoroughly inclosed

and bridged over by hollow blocks of porous terra cotta, the best non-conducting fire-proof material at present available.

The evacuation of the south wing by the Patent Office was a very onerous task, in which we were called upon to assist. It was completed on June 15.

In the mean time working-drawings for the iron-work of the new floors and roofs and for fire-proof arch blocks for the roofs were prepared, within the limit of the funds at disposal, and duly advertised. On June 11 the bids for iron-work were opened, and the award made to the lowest bidder, C. A. Schneider's Sons, of Washington, at $24,280.

On July 10 the bids for fire-proof blocks were opened, and the award made to the lowest bidders, who were again C. A. Schneider's Sons, of Washington, at 36 and 26 cents per square foot for two different sizes and shapes of the material.

On October 10, bids were opened for furnishing sheet-copper for roofing, and the award made to the Ansonia Brass and Copper Company of New York, at 21½ cents per pound for tinned copper and at 9½ cents per pound for new tinned copper in exchange for worn plain sheet-copper. The competition for these materials was participated in by some of the most noted firms of the country, East and West.

As is unavoidable in repair work, materials required in smaller quantities have been purchased in open market.

Immediately after the evacuation of the upper story of the building the removal of the old work was carried on with great care, so as to avoid all risks and not to disturb the office work in the lower stories.

The removal of the rubbish from the building was done after office hours and during the nights. Notwithstanding persistent efforts it could not be completed before the 15th of September.

A number of sandstone columns and cornices, for which there is no use in the fire-proof construction, were transferred to the Quartermaster's Department of the Army for use in the soldiers' cemeteries. During these stages of the work the old wooden roofs were temporarily shored up from the floors of the model-halls. As soon as one side of the building was cleared, brick-work was commenced and carried on, with a view to have the walls of the new construction in place by the time the iron-work arrives. On September 18 the brick-work was up to the height of the first gallery and the iron beams for the floor were set.

On September 25 the roof of the main portico was taken off, and at the date of this report the erection of the new fire-proof roof over the portico is in a fair state of progress. All preparations are now being made, so that whenever the delivery of the iron-work for the roofs over the main building is complete they can be promptly erected in place.

At the present stage of the work temporary roofs and gutters are being constructed upon the new galleries, within the main walls of the building, and the old roof which is in the way of the new erections is being gradually removed.

The appropriation made by Congress in March, 1883, was, $60,000. The expenditures foot up to date $26,072.30. Hence balance available for liquidating outstanding liabilities, &c., $33,927.70.

With these funds the building will be brought under a water-tight roof, overlaid with Portland cement concrete, and this again will be covered with a copper roof of most approved modern construction.

The limited funds at disposal will not allow the work to be pushed forward during the approaching winter and early spring, when employment is eagerly sought by skilled mechanics at moderate rates. This is

to be regretted in the interest of economy and the early reoccupation of the building.

For particulars in this respect reference is made to our letter of October 5, accompanying the estimates for next fiscal year.

MODEL-CASES.

The fire-proof model-cases contracted for after public advertisement under an appropriation obtained in June, 1881, have proved a success in every respect. They have not all been delivered yet, so that a final statement must be deferred until a later date.

Very respectfully, your obedient servants,

CLUSS & SCHULZE, *Architects.*

Hon. HENRY M. TELLER,
Secretary of the Interior.

REPORT ON THE CONSTRUCTION OF THE NEW PENSION BUILDING.

WASHINGTON, D. C., *September* 15, 1883.

SIR: The law approved August 7, 1882, sundry civil bill, appropriated for the erection of a brick and metal fire-proof building to be used and occupied by the Pension Bureau the sum of $250,000. It required the building to be located on an open space on B street, at intersection of Ohio and Louisiana avenues, unless the President should approve, on the recommendation of the Secretary of War, Secretary of the Interior, and the Architect, another location upon some other Government reservation in the city of Washington.

The law passed March 3, 1883, made further appropriation for completion of this building of $150,000, and also appropriated $40,000 for supplying it with apparatus for heating and ventilation.

The site indicated by law was found to be unsuitable after careful examination, including the sinking of test pits and driving of piles. Much of the soil had been made by filling with the rubbish of the city a basin of the old Washington Canal, now entirely filled up, and near this portion of the canal for many years the city gas-works had been located; their drainage, added to that of the city generally, had accumulated material very foul and ill-smelling and threatening the healthfulness of any building erected upon it. The site, too, is subject to floods which have submerged it to the depth of 4 feet 4 inches, so that there it would not have been practicable to place the boilers and the stores of fuel in vaults below the lower floor—a very great disadvantage. To prevent destruction of papers and records and of furniture it would have been necessary to raise the lower floor by filling in of earth to the height of several feet above the surrounding streets.

As the ordinary population of the Pension Building would be over 1,500 persons, it was manifestly important not to assemble them at this site; moreover, the examination showed that it would be necessary to support so heavy a building upon piles thickly located and deeply driven, which would be very costly.

The President, therefore, approved of a site at a height of 35 feet above tide-water in the north portion of Judiciary Square, fronting on F and G streets, and at some distance from Fourth and Fifth streets.

The dimensions of the building were fixed at 400 feet east and west, and 200 feet north and south.

The plans approved by the officers to whom the law committed discretion as to plans accompany this report.

The building will be three stories in height, surrounding a central hall of large size, which, instead of being left as an open court-yard, will be utilized as are the central banking rooms of the larger banking institutions and the halls of the Senate and Representatives.

This hall will be lighted by clear-story windows above the roof of the third-story office rooms; will be covered with an iron-framed roof, sheathed with hollow earthen tiles to exclude heat and cold, and the whole building will be thus composed of brick and metal, and will be itself perfectly fire-proof. Tiles of burnt clay are a form of brick.

The extent and magnitude of the building will give it dignity, which is not frittered away by a multitude of small details.

The window dressings are of brick and burnt clay of forms approved by long use. The long unbroken lines of windows are separated by molded belt courses at each story, and are surmounted by a deep cornicione in the Italian style.

A belt course or frieze 3 feet in height at the level of the second floor, reproducing such features of an army and navy in campaign as could be included within the limits of height available, surrounds the whole building, and alludes to the origin of the Bureau for whose use the building is intended.

The office rooms will be reached by four wide stairways and by two elevators placed near the entrance doors, of which there are four, one in the middle of each front. These are suitably decorated and are constructed of brick and metal, except that the architrave immediately over each door having too great projection to be safely constructed of brick or terra cotta, has been made of Ohio stone.

The general plans were approved by the Secretary of War, Mr. Robert Lincoln, and by the Acting Secretary of the Interior, Mr. M. L. Joslyn, on the 1st of November, 1882, and on the 2d of November ground was broken on Judiciary Square.

In excavating for foundations it appeared that the site under most of the building had been artificially raised, and that under one-half of the building such deep foundations were needed, that it was better to make use of the high foundation walls necessary, by arching over the included space and constructing deep and well-drained cellars.

It was not at first intended to make such cellars, which are 600 feet long, measured on the outer wall, and thus an unanticipated expense has been incurred. The work has been industriously prosecuted since the first breaking of ground.

Contracts have been made, after due advertisement and competition, for the excavation, for the rubble masonry of foundation walls, including the outer walls of cellars, for concrete, cement, lime, sand, gravel, bricks, wrought iron for clamps to tie the walls together, for hollow sheathing tiles to sheath the roof, for cut stone work of the bases and architraves of the great entrance gateways, for terra-cotta, and generally for the supply of material and work thus far undertaken. The laying of bricks has been done by day's work, for the reason that no very satisfactory offer was received at the letting of contracts, and that experience shows that it is not possible to secure such solid brick masonry as is necessary for such a building as the Pension Office, from workmen employed by contractors at the prices at which public contracts are let.

Every brick must be thoroughly imbedded in mortar on all sides; this costs money, and is never done in private work upon which bricklayers now learn their trade. The floors of the building are all to be arched in brick-work, the walls are to be as thin as with good workmanship will be sufficient to insure stability under the thrust of these arches, and, were the brick-work of the walls loose and imperfect, it would be necessary to use much more masonry than will now be used in them.

At this date the construction of cellars and of foundations is completed. The cellars are arched with brick. The walls of the building have been raised to the level of the second floor, and a portion of the frieze which is to surround the building at level of second floor is in place.

Workmen are now engaged in making and setting centers for the arches under second floor; they have erected the columns and turned a portion of the arches to support the floor of the second gallery, which surrounds the interior hall.

The bases of the columns of the two open screens which divide the middle of the hall from the ends, and which carry the upper portion and roof of the central hall, are built; they are of molded and enriched terra-cotta, backed up and filled in with brick masonry.

A large quantity of material is on the ground, and under the contracts made the supply is regular and sufficient.

About 73 bricklayers are at work upon the walls and arches, and the work is making good progress.

Contract has been made for all the boilers, boiler-setting, pipes, radiators, and valves, &c., complete for heating apparatus, for the sum of $23,277. This, however, does not include masonry and cutting of trenches to contain the supply pipes, some of which will be put in the earth below the ground floor, nor the cutting of grooves and holes through the walls for the passage of pipes. This part of the work, not costly, will be done by the mechanics employed by the United States.

The expenditures to date have been—

For Pension Building	$126,970 14
For heating apparatus	519 45

There remain on hand and available for prosecution of the work—

Pension Building	$223,129 86
Heating apparatus	39,480 55

For more detailed information I inclose various documents showing the objects of expenditure, a list of the several contracts, and copies of the plans adopted for the building now in course of execution, except that the nature of the site has compelled the addition of a cellar under the whole south half of the building.

I remain, very respectfully, your obedient servant,

M. C. MEIGS,
Superintending Engineer and Architect,
late Quartermaster-General.

Hon. H. M. TELLER,
Secretary of the Interior.

REPORT OF THE FREEDMEN'S HOSPITAL.

FREEDMEN'S HOSPITAL,
Washington, D. C., August 8, 1883.

SIR: I have the honor to submit the annual report of this hospital for the fiscal year ending June 30, 1883.

The whole number of patients admitted and treated was 1,601, 1,017 of whom were colored, 583 white, and 1 Indian (male). Of the colored, 520 were males, 497 females. Of the white, 465 were males, 118 females. The average admissions were $114\frac{5}{12}$ per month, an increase of 20 per cent. over the admissions of last year, and more than double the number admitted five years ago.

There were 77 cases of confinement. The death rate has been large, but smaller than last year, though the number treated was one-fifth greater. A large per cent. of the deaths resulted from consumption, and very many were in the hospital only a short time prior to death, as the following statement will show:

One died in five minutes after admission.
One died in one and a half hours after admission.
Four died in eight hours after admission.
Three died in twelve hours after admission.
Two died in eighteen hours after admission.
Four died in twenty-four hours after admission.
Three died in thirty-six hours after admission.
One died in forty-three hours after admission.
Three died in forty-eight hours after admission.
Ten died in three days after admission.
Four died in four days after admission.
Three died in five days after admission.
Four died in six days after admission.
Three died in seven days after admission.
Three died in eight days after admission.
Three died in nine days after admission.

For causes of death see Table C.

A large number of surgical operations were performed during the year. The management congratulates itself upon the uniform success that has attended them. I will mention the principal ones. Amputation of thigh, 2; amputation of fingers, 4; removal of cancer, 3; removal of fatty tumors, 2; fistula in ano, 5; removal of caries of submaxillary, 1; tapping of bladder through rectum, 1; removal of epulis, 1; removal of hypertrophy of clitoris, 1; removal of hæmorrhoids, 1; setting of fractured femur, 2; of humerus, 1; of forearm, 2; fracture and dislocation of elbow, 1; compound fracture of both legs, 1; compound fracture of leg, 1; simple fracture of leg, 2; fracture of fibula, 3; fracture of ribs, 3; fracture of clavicle, 2; dislocation of shoulder, 2; dislocation of femur, 1; gunshot wounds, 11. In addition there was a large number of other injuries as will be shown in Table B.

I will inclose tabulated statements showing the nativity of the patients and the various diseases and conditions for which they were admitted to the hospital. (Tables A and B.)

About 200 pensioners were admitted and treated upon the recommendations of the Commissioner of Pensions and the chief of police. The hospital has been of special service to this class, who come from all parts

of the country and from the various Homes, and arrive here in a sick and destitute condition.

In the dispensary attached 2,095 persons were treated.

During the year I was compelled to make quite a number of improvements for the health of the patients and safety of the property. They consisted in repairing the line fencings, reroofing of two female wards, which leaked badly and caused the ceilings to fall, which was a source of danger. Two wards were painted outside and six inside, and the hallway of the main building. The grounds have been much improved by the planting of flowers and shrubbery and present an attractive appearance.

The sanitary condition of the institution is excellent. The deportment of the patients and attendants has been all that could be desired. The management takes pleasure in noting the increased interest of the better class of citizens in the institution. The comfort of the patients requires some additional improvements which the present appropriation will not warrant me in undertaking. There should be four additional water-closets built. There should also be verandas at the ends of the two female wards, and across the west front of the main building. In addition to the sanitary advantages they would afford, they would also serve as fire-escapes. I shall transmit estimates for these improvements with the estimates for the next fiscal year.

Convalescent patients and those waiting to be confined are required, as far as practicable, to perform some light service. Most of the clothing used in the hospital is made by the females. The following statement will show the principal articles: bedsacks, 32; counterpanes, 96; pillow-cases, 87; pillow-ticks, 53; sheets, 200; cotton shirts, 184; drawers, 171; chemises, 92; dresses, 128; aprons, 147; handkerchiefs, 81; bonnets, 16; skirts, 77; night-gowns, 26.

Religious services are held three times a week in the chapel, on Wednesday evenings and Sunday mornings and evenings. These exercises are conducted by two theological students from Howard University, who receive their board for their services. They visit the wards daily, write letters for the patients, and perform such other services as may be required of them. Ministers from the city, representing the various denominations are permitted to visit the hospital at all hours of the day and night.

Medical students from the several medical colleges have availed themselves of the clinics and the opportunity to study disease at the bedside, under the supervision of the medical staff.

I desire to make mention of the faithful manner in which my associates and the attendants have discharged their duty. The number of admissions has been large and the medical corps has been fully taxed in providing and caring for the sick.

All of which is respectfully submitted.

Very respectfully,

C. B. PURVIS, M. D.
Surgeon-in-Chief.

Hon. H. M. TELLER,
Secretary of the Interior.

TABLE A.—*Nativity of patients.*

Virginia	405	Georgia	4
District of Columbia	241	Italy	3
Maryland	217	New Hampshire	3
Ireland	116	Delaware	3
Germany	67	Rhode Island	3
New York	48	Sweden	2
Pennsylvania	46	Florida	2
England	32	Indiana	2
North Carolina	18	Nova Scotia	1
Ohio	12	Michigan	2
Massachusetts	12	Poland	1
Kentucky	11	Hayti	1
Canada	11	Oregon	1
West Virginia	9	Portugal	1
Scotland	8	Missouri	1
Maine	7	Alabama	1
France	7	Spain	1
Mississippi	6	Nebraska	1
Tennessee	5	Panama	1
New Jersey	5	Texas	1
Illinois	5	Arizona	1
New Brunswick	4	Connecticut	1
Vermont	4	Denmark	1
South Carolina	4	At sea	1
Switzerland	4	Unknown	26
Louisiana	4		

TABLE B.

The diseases and conditions for which the patients were admitted to hospital and treated in dispensary were as follows:

Disease, &c.	Hospital.	Dispensary.	Disease, &c.	Hospital.	Dispensary.
Fracture of humerus	1	1	Abscess	9	13
Fracture of forearm	1	1	Abscess of pelvis	1	.....
Fracture and dislocation of elbow	1	.....	Abscess of knee joint	1	.....
Fracture of femur	1	1	Psoas abscess	3	.....
Comp. com. fracture of both legs	1	.....	Burns	4	7
Comp. com. fracture of leg	1	.....	Cartilaginous tumors	1	.....
Fracture of leg	2	.....	Tumor of eye	.....	3
Fracture of fibula	3	.....	Tumor of throat	.....	1
Fracture of ribs	2	1	Tumor of brain	1	.....
Fracture of clavicle	2	.....	Keloid tumor	.....	2
Dislocation of shoulder	2	1	Cancer of face	1	.....
Dislocation of femur	.....	1	Cancer of throat	1	.....
Gunshot wounds	7	4	Cancer of breast	5	2
Incised wounds	6	13	Cancer of duodenum	1	.....
Lacerated wounds	2	10	Cancer of rectum	1	.....
Contused wounds	4	15	Cancer of uterus	3	.....
Punctured wounds	1	.....	Senile gangrene	1	.....
Contusions	13	2	Epistaxis	.....	2
Sprains	6	10	Syphilis	39	35
Internal hemorrhage	1	.....	Syphilis, secondary	18	10
Concussion of spinal cord	1	.....	Syphilis, tertiary	4	10
Concussion of brain	1	.....	Gonorrhœa	11	59
Inflammation of knee joint	2	.....	Bubo	9	5
Inflammation of ankle joint	1	1	Orchitis	4	3
Periostitis	2	4	Hydrocele	1	.....
Synovitis	4	.....	Fistula of urethra	3	.....
Paronychia	2	2	Stricture of urethra	3	.....
Bunion	2	.....	Dysuria	1	3
Anthrax	1	1	Hæmaturia	.....	5
Frost-bite	9	6	Incontinence of urine	.....	2
Dog-bite	1	.....	Retention of urine	.....	3
Caries	9	3	Cystitis	3	6
Necrosis	2	.....	Urinary calculi	1	.....
Anchylosis	.....	1	Fistula in ano	6	1
Chronic ulcer	27	26	Hæmorrhoids	2	6

TABLE B—Continued.

Disease, &c.	Hospital.	Dispensary.	Disease, &c.	Hospital.	Dispensary.
Bright's disease	15	4	Stomatitis	.....	1
Ascites	2	1	Dyspepsia	7	51
General dropsy	2	.....	Parotitis	4	7
Acute rheumatism	47	90	Constipation	2	103
Chronic rheumatism	63	9	Pyrosis	.....	2
Lumbago	9	16	Hæmatemesis	.....	1
Sciatica	2	1	Gastralgia	.....	9
Torticollis	1	.....	Acute diarrhœa	22	51
Alcoholism	45	.....	Chronic diarrhœa	15	1
Delirium tremens	8	.....	Acute dysentery	2	9
Amaurosis	.....	25	Entero-colitis	.....	1
Cataract	2	2	Cholera morbus	1	3
Conjunctivitis	4	24	Hypertrophy of liver	1	.....
Conjunctivitis, granular	.....	3	Scirrhus of liver	2	.....
Ophthalmia, scrofulous	1	.....	Jaundice	1	5
Iritis	1	1	Hernia	7	3
Staphyloma	1	.....	Cephalalgia	2	26
Scarlatina	2	.....	Neuralgia	6	17
Rubeola	4	.....	Hemicrania	.....	3
Varicella	.....	1	Dementia	10	.....
Tinea capitis	.....	1	Insanity	3	.....
Eczema	3	21	Convulsions	2	6
Urticaria	1	2	Epilepsy	20	2
Herpes	2	4	Paralysis	24	4
Acne rosacea	1	.....	Locomotor ataxia	3	.....
Erythema	.....	2	Congestion of brain	7	.....
Otorrhœa	.....	2	Apoplexy	4	.....
Goitre	.....	2	Embolism	1	.....
Glandular enlargement	.....	9	Spinal irritation	1	.....
Scrofula	2	13	Cerebro-spinal meningitis	1	.....
Intermittent fever, quotidian	53	79	Hysteria	7	26
Intermittent fever, tertian	81	195	Insomnia	.....	1
Remittent fever	22	21	Melanopathia	1	.....
Typhoid fever	15	.....	Poison	.....	2
Malarial fever	3	.....	Poison, p. oak	1	.....
Typho-malarial fever	1	.....	Cellulitis	3	.....
Erysipelas	13	4	Curvature of spine	1	1
Acute bronchitis	35	175	Opium habit	1	.....
Chronic bronchitis	5	100	Pregnancy	95	17
Tonsillitis	7	55	Confinement	4	.....
Asthma	5	4	Abortion	8	1
Catarrh	.....	4	Mammitis	3	.....
Influenza	.....	9	Mammary abscess	.....	3
Pleurisy	9	49	Ovaritis	2	2
Congestion of lungs	2	.....	Ovarian tumors	1	.....
Pneumonia	9	12	Vesico-vaginal fistula	1	.....
Pleuro-pneumonia	3	.....	Recto-vaginal fistula	1	.....
Typhoid-pneumonia	1	.....	Retroversion	1	1
Pleurodynia	4	4	Antiversion	.....	1
Gangrene of lung	1	.....	Subluxation	1	.....
Acute laryngitis	1	2	Subinvolution	3	1
Spasm of glottis	1	.....	Prolapsus uteri	1	2
Dyspnœa	.....	16	Endocervicitis	2	.....
Croup	.....	6	Ulceration of uterus	2	.....
Phthisis pulmonalis	105	27	Hypertrophy of uterus	1	.....
Phthisis laryngeal	2	.....	Fibroid tumors of uterus	5	.....
Hæmoptysis	7	3	Congestion of uterus	1	.....
Tuberculosis	1	.....	Acute metritis	1	6
Peritonitis	2	4	Endometritis	1	.....
Valvular disease of heart	14	.....	Menorrhagia	4	18
Functional disease of heart	4	7	Amenorrhœa	1	7
Hypertrophy of heart	4	.....	Dysmenorrhœa	1	4
Endocarditis	1	.....	Leucorrhœa	2	19
Cardiac dropsy	10	1	Infancy	57	.....
Angina pectoris	1	.....	Congenital debility	3	8
Rupture of pulmonary artery	1	.....	Dentition	.....	1
Hydrothorax	1	.....	Cholera infantum	.....	1
Gastritis	4	9	Worms	.....	15
Gastric ulcer	2	.....	Senile debility	15	20
Colic	1	22	Impotency	.....	1
Epulis	1	.....	Convalescent	50	.....
Pharyngitis	.....	11	Odontalgia	.....	156
Aphthæ	.....	3	Teeth extracted	.....	160

TABLE C.—*Causes of death.*

Diseases, &c.	White.	Colored.	Total.	Diseases, &c.	White.	Colored.	Total.
pulmonalis	9	56	65	Abcess of pelvis	....	1	1
ibility	1	14	15	Psoas abcess	....	1	1
fever	2	9	11	Comp. com. fracture r. leg	....	1	1
disease	2	9	11	Comp. com. fracture both legs	....	1	1
dropsy	....	7	7	Scirrhus of liver	....	1	1
diarrhœa	1	6	7	Paralysis	....	1	1
on of brain	1	4	5	Aneurism of arch of aorta	....	1	1
disease of heart	....	4	4	Senile gangrene	....	1	1
dropsy	....	3	3	Phthisis, laryngeal	....	1	1
ysis	....	3	3	Tuberculosis	....	1	1
as	1	2	3	Caries of femur and hip joint	....	1	1
neumonia	1	2	3	Acute diarrhœa	1	....	1
l debility	....	3	3	Embolism	....	1	1
ia	....	2	2	Internal hemorrhage	....	1	1
on of lungs	....	2	2	Hydrothorax	....	1	1
phy of heart	....	2	2	Rupture of pulmonary artery	....	1	1
f uterus	....	2	2	Compression of brain	....	1	1
y	....	2	2	Vesico-vaginal fistula	....	1	1
syphilis	1	1	2	Cancer of breast	....	1	1
f face	1	....	1	Malarial fever	1	....	1
f breast	....	1	1	Typho-malarial fever	....	1	1
pneumonia	....	1	1	Cholera infantum	....	1	1
phy of liver	....	1	1				
ulceration of stomach	....	1	1	Total	22	157	179

TABLE D.

	White.			Colored.			Indian.	Grand total.
	Males.	Females.	Total.	Males.	Females.	Total.	Males.	
g June 30, 1882	25	9	34	92	102	194	.....	228
	438	107	545	388	362	750	1	1,296
	2	2	4	40	33	73	.....	77
als	440	109	549	428	395	823	1	1,373
als in hospital	465	118	583	520	497	1,017	1	1,601
ed	418	90	508	354	339	693	1	1,202
	16	6	22	98	59	157	.....	179
	.....	.....	.....	3	3	6	.....	6
als	434	96	530	455	401	856	1	1,387
g June 30, 1883	31	22	53	65	96	161	.....	214

REPORT OF THE BOARD OF VISITORS OF THE GOVERNMENT HOSPITAL FOR THE INSANE.

GOVERNMENT HOSPITAL FOR THE INSANE,
Near Washington, D. C., October 1, 1883.

SIR: The Board of Visitors of the hospital respectfully submit this their twenty-eighth annual report.

The following tables exhibit in a condensed form the extent and result of the hospital work during the past as well as previous years:

Summary.

	Males.	Females.	Totals.
Remaining June 30, 1882	709	233	942
Admitted during the year ending June 30, 1883	201	64	265
Whole number under treatment	910	297	1,207
DISCHARGED.			
Recovered	76	18	94
Improved	33	16	49
Unimproved	.....	6	6
Not insane	.....	1	1
Died	46	17	63
Total discharged and died	155	58	213
Remaining June 30, 1883	755	239	994

Admissions and discharges.

	Males.			Females.			Totals.	
REMAINING JUNE 30, 1882.								
Army { White	410			3				
Army { Colored	10	420		.....	3		423	
Navy { White	49							
Navy { Colored	.....	49					49	
Marine Hospital Service { White	11							
Marine Hospital Service { Colored	3	14					14	
Civil life { White	168			167				
Civil life { Colored	58	226	709	63	230	233	456	942
ADMITTED DURING THE YEAR 1882-'83.								
Army { White	79							
Army { Colored	1	80					80	
Navy { White	12							
Navy { Colored	1	13					13	
Marine Hospital Service { White	5							
Marine Hospital Service { Colored	1	6					6	
Civil life { White	76			45				
Civil life { Colored	26	102	201	19	64	64	166	265
UNDER TREATMENT DURING THE YEAR.								
Army { White	489			3				
Army { Colored	11	500		.....	3		503	
Navy { White	61							
Navy { Colored	1	62					62	
Marine Hospital Service { White	16							
Marine Hospital Service { Colored	4	20					20	
Civil life { White	244			212				
Civil life { Colored	84	328	910	82	294	297	622	1,207

Admissions and discharges—Continued.

		Males.			Females.			Totals.	
DISCHARGED DURING THE YEAR—*Recovered.*									
Army	White	29							
	Colored	2	31					31	
Navy	White	4							
	Colored	.....	4					4	
Marine Hospital Service	White								
	Colored								
Civil life	White	37			13				
	Colored	4	41	76	5	18	18	59	94
DISCHARGED DURING THE YEAR—*Improved.*									
Army	White	9							
	Colored	.....	9					9	
Navy	White	1							
	Colored	.....	1					1	
Marine Hospital Service	White								
	Colored								
Civil life	White	21			13				
	Colored	2	23	33	3	16	16	39	49
DISCHARGED DURING THE YEAR—*Unimproved.*									
Civil life	White				6				
	Colored				.....	6			6
DISCHARGED DURING THE YEAR—*Not insane.*									
Civil life	White				1				
	Colored				.....	1			1
DECEASED DURING THE YEAR.									
Army	White	17							
	Colored	.....	17					17	
Navy	White	.....							
	Colored	1	1					1	
Marine Hospital Service	White	3							
	Colored	.....	3					3	
Civil life	White	18			10				
	Colored	7	25	46	7	17	17	42	63
REMAINING JUNE 30, 1883.									
Army	White	434			3				
	Colored	9	443		.....	3		446	
Navy	White	56							
	Colored	.....	56					56	
Marine Hospital Service	White	13							
	Colored	4	17					17	
Civil life	White	168			169				
	Colored	71	239	755	67	236	239	475	994

NOTE.—There were ten less persons than cases under treatment in the course of the year by reason of readmissions.

The patients from civil life remaining June 30, 1883, are classified as follows:

	Males.	Females.	Total.
District of Columbia, transient	24	7	31
District of Columbia, resident indigent	197	223	420
District of Columbia convicts	8	.....	8
United States convicts	5	.....	5
Private patients	5	6	11
Total	239	236	475

Monthly changes of population.

Date.	Admitted.			Discharged.						
							Died.			
	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.	Total discharged, including deaths.
July, 1882	16	10	26	14	7	21	1	2	3	24
August, 1882	16	3	19	9	5	14	1	1	2	16
September, 1882	9	6	15	7	3	10	3	.....	3	13
October, 1882	17	3	20	10	4	14	4	.....	4	18
November, 1882	9	4	13	11	2	13	5	3	8	21
December, 1882	35	10	45	10	1	11	5	1	6	17
January, 1883	13	4	17	5	1	6	6	1	7	13
February, 1883	14	6	20	4	4	8	9	4	13	21
March, 1883	18	4	22	6	4	10	2	1	3	13
April, 1883	19	6	25	6	2	8	5	1	6	14
May, 1883	19	5	24	11	4	15	3	2	5	20
June, 1883	16	3	19	16	4	20	2	1	3	23
Total	201	64	265	109	41	150	46	17	63	213

Physical condition of those who died.

Apoplexy	6	Organic disease of brain and congestive chill	1
Apoplexy, epileptic	2	Organic disease of brain and heart	1
Asphyxia*	2	Organic disease of heart	3
Epileptic convulsions	4	Paresis	6
Exhaustion from chronic epileptic mania	1	Paresis, with epileptiform convulsions	4
Fracture of skull—suicide	1	Paralysis, bulbar	1
Gastritis	1	Phthisis pulmonalis	4
Inanition	4	Pneumonia	3
Inanition and diarrhœa	2	Remittent fever	1
Intermittent fever	1	Rheumatism, with organic disease of heart	1
Necrosis of femur	1	Septicæmia	1
Necrosis of tibia	1		63
Old age	1		
Organic disease of brain	10		

*Accidental choking from food in larynx.

Duration of the mental disease, on admission, of those who recovered.

Under 10 days	8	Between 10 and 12 months	1
Between 10 and 20 days	11	1 and 2 years	9
20 and 30 days	4	2 and 3 years	4
1 and 2 months	13	3 and 4 years	4
2 and 3 months	6	4 and 5 years	2
3 and 4 months	16	5 and 6 years	2
4 and 5 months	4	10 and 12 years	2
5 and 6 months	2		94
6 and 8 months	5		
8 and 10 months	1		

Duration of the mental disease of those who died.

Three months	2	Twelve years	1
Nine months	1	Fourteen years	1
Eleven months	1	Fifteen years	1
One year	12	Sixteen years	1
Two years	5	Seventeen years	1
Three years	6	Nineteen years	2
Four years	2	Twenty-six years	2
Five years	1	Twenty-seven years	1
Six years	2	Twenty-eight years	1
Seven years	3	Thirty years	1
Eight years	3	Unknown	6
Nine years	2		
Ten years	2		63
Eleven years	3		

Duration of disease on admission.

		Males.			Females.			Totals.	
LESS THAN SIX MONTHS.									
Army	White	26							
	Colored		26					26	
Navy	White	10							
	Colored		10					10	
Marine Hospital Service	White	4							
	Colored	1	5					5	
Civil life	White	38			22				
	Colored	8	46	87	13	35	35	81	122
LESS THAN ONE YEAR.									
Army	White	10							
	Colored		10					10	
Navy	White	1							
	Colored		1					1	
Marine Hospital Service	White								
	Colored								
Civil life	White				3				
	Colored	1	1	12	3	6	6	7	18
ONE TO TWO YEARS.									
Army	White	12							
	Colored	1	13					13	
Navy	White								
	Colored								
Marine Hospital Service	White	1							
	Colored		1					1	
Civil life	White	10			2				
	Colored	7	17	31	1	3	3	20	34
OVER TWO YEARS.									
Army	White	6							
	Colored		6					6	
Navy	White	1							
	Colored		1					1	
Marine Hospital Service	White								
	Colored								
Civil life	White	9			3				
	Colored		9	16		3	3	12	19

Duration of disease on admission—Continued.

		Males.			Females.			Totals.	
OVER THREE YEARS.									
Army	White	3							
	Colored		3					3	
Navy	White								
	Colored								
Marine Hospital Service	White								
	Colored								
Civil life	White	5			2				
	Colored		5	8		2	2	7	10
OVER FOUR YEARS.									
Army	White	1							
	Colored		1					1	
Navy	White								
	Colored								
Marine Hospital Service	White								
	Colored								
Civil life	White	2			1				
	Colored		2	3	1	2	2		5
FIVE TO TEN YEARS.									
Army	White	11							
	Colored		11					11	
Navy	White								
	Colored								
Marine Hospital Service	White								
	Colored								
Civil life	White	3			2				
	Colored		3	14		2	2	5	16
TEN TO TWENTY YEARS.									
Army	White	7							
	Colored		7					7	
Navy	White								
	Colored	1	1					1	
Marine Hospital Service	White								
	Colored								
Civil life	White	6			7				
	Colored	4	10	18	1	8	8	18	26
OVER TWENTY YEARS.									
Army	White	2							
	Colored		2					2	
Navy	White								
	Colored								
Marine Hospital Service	White								
	Colored								
Civil life	White	2			2				
	Colored	6	8	10		2	2	10	12
UNKNOWN.									
Army	White	1							
	Colored		1					1	
Navy	White								
	Colored								
Marine Hospital Service	White								
	Colored								

Duration of disease on admission—Continued.

		Males.			Females.			Totals.	
UNKNOWN—Continued.									
Civil life	White				1			1	
	Colored			1		1			2
NOT INSANE.									
Civil life	White	1							1
									265

Table showing the nativity, as far as could be ascertained, of the 5,675 cases treated.

NATIVE BORN.		FOREIGN BORN.	
District of Columbia	629	Ireland	1,145
New York	419	Germany	753
Maryland	409	England	134
Virginia	424	France	53
Pennsylvania	300	Canada	48
Ohio	152	Scotland	39
Massachusetts	130	Switzerland	17
Maine	65	Italy	23
Illinois	54	Denmark	15
Connecticut	49	Norway	11
New Hampshire	54	Sweden	16
Indiana	42	Poland	11
Kentucky	39	Russia	8
Michigan	33	Austria	8
New Jersey	40	Nova Scotia	9
Tennessee	26	Spain	4
Wisconsin	21	Holland	7
Vermont	28	Wales	4
Missouri	27	Portugal	4
Rhode Island	19	Hungary	4
Delaware	14	Mexico	4
North Carolina	22	Saxony	4
Alabama	9	Malta	3
South Carolina	11	Belgium	3
Iowa	4	Buenos Ayres	1
Georgia	12	Costa Rica	1
Mississippi	12	Bavaria	2
Louisiana	8	Sicily	1
West Virginia	10	British Columbia	1
Kansas	2	British possessions	1
Florida	2	East Indies (British)	2
Texas	5	West Indies (British)	5
California	3	West Indies (Hayti)	1
Choctaw Nation	2	New Brunswick	1
Colorado	1	Cuba	2
Arkansas	1	China	1
Indian Territory	1	Sandwich Islands	1
Montana Territory	1	Coast of Africa	2
		Cyprus	1
Total	3,080	Turkey	1
		Total	2,351

Native born	3,080
Foreign born	2,351
Unknown	244
Total	5,675

Form of disease in those admitted.

	Total last year.	Admitted during year.	Total.		Total last year.	Admitted during year.	Total.
Mania, acute	1,936	64	2,000	Kleptomania	3	.....	3
Mania, chronic	863	59	922	Nymphomania	3	.....	3
Melancholia	680	37	717	Imbecility	50	6	56
Dementia	1,354	57	1,411	Opium eaters	11	.....	11
Dementia, senile	62	7	69	Not insane	7	1	8
Paresis	78	11	84				
Dipsomania	366	23	389	Total	5,410	265	5,675
Typhomania (Bell's disease)	2	.....	2				

As far as could be ascertained, the volunteers of the Army and Navy under treatment during the year ending June 30, 1883, entered the service from the following States:

	Army.	Navy.	Total.		Army.	Navy.	Total.
New York	41	.....	41	Maine	7	.....	7
Ohio	29	.....	29	Nebraska	1	.....	1
Pennsylvania	20	.....	20	Delaware	1	.....	1
Indiana	19	.....	19	Minnesota	2	.....	2
Michigan	11	.....	11	Iowa	4	.....	4
Illinois	18	.....	18	North Carolina	1	.....	1
Wisconsin	7	.....	7	New Mexico	1	.....	1
Missouri	5	.....	5	Kentucky	1	.....	1
Connecticut	7	.....	7	Louisiana	1	.....	1
New Hampshire	3	.....	3	West Virginia	2	.....	2
Vermont	1	.....	1	Rhode Island	1	.....	1
Maryland	8	.....	8	Unknown	10	2	12
Massachusetts	20	.....	20				
New Jersey	5	.....	5		226	2	228

Tabular statement of the time of life at which the 5,675 cases treated since the opening of the institution became insane.

	1882.	Admitted.	1883.
Under 10 years	88	13	101
Between 10 and 15 years	57	3	60
15 and 20 years	336	18	354
20 and 25 years	976	30	1,006
25 and 30 years	1,076	47	1,123
30 and 35 years	931	38	969
35 and 40 years	626	29	655
40 and 45 years	415	28	443
45 and 50 years	282	19	301
50 and 60 years	271	21	292
60 and 70 years	153	12	165
70 and 80 years	53	4	57
80 and 90 years	8	.....	8
Unknown	131	2	133
Not insane	7	1	8
Total	5,410	265	5,675

Private patients.

There were at the beginning of the year	9 males,	8 females..	17
Received during the year	8 males,	4 females..	12
Whole number under treatment	17 males,	12 females..	29
Discharged during the year	12 males,	6 females..	18
Remaining at the end of the year	5 males,	6 females..	11

Years.	Admitted.					Of each year's discharged and died in 1883.											Total discharged and died of each year's admissions.											Remaining of each year's admissions, June 30, 1883.		
	New cases.		Relapsed cases.			Recovered.			Improved.			Unimproved.			Died.			Recovered.			Improved.			Unimproved.			Died.					
	Male.	Female.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.
1855	26	37	.....	.....	63	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	1	1	3	4	1	1	2	3	4	7	17	26	43	4	3	7
1855–'56	36	11	.....	.....	47	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	9	6	15	2	1	3	2	.....	2	20	3	23	3	1	4
1856–'57	24	25	1	2	52	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	8	6	14	3	3	6	3	4	7	11	9	20	.....	5	5
1857–'58	27	11	2	3	43	.....	.....	.....	.....	.....	.....	.....	1	1	.....	.....	.....	16	4	20	2	.....	2	3	1	4	7	6	13	1	3	4
1858–'59	45	15	2	3	65	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	12	5	17	6	5	11	6	2	8	20	4	24	3	2	5
1859–'60	67	19	1	5	92	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	36	8	44	9	2	11	3	1	4	17	11	28	3	2	5
1860–'61	60	30	4	1	95	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	38	15	53	5	3	8	2	.....	2	17	11	28	2	2	4
1861–'62	172	11	2	1	186	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	128	4	132	12	1	13	1	.....	1	32	5	37	1	2	3
1862–'63	323	18	7	7	355	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	228	5	233	36	6	42	2	4	6	61	5	66	3	5	8
1863–'64	462	23	22	2	509	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	296	8	304	99	7	106	8	.....	8	75	8	83	6	2	8
1864–'65	452	34	26	2	514	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	264	7	271	66	7	73	13	1	14	119	20	139	16	1	17
1865–'66	182	24	12	4	222	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	97	5	102	20	4	24	10	1	11	51	12	63	16	6	22
1866–'67	71	18	17	3	109	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	42	8	50	6	3	9	8	.....	8	21	6	27	11	4	15
1867–'68	105	28	15	5	153	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	53	15	68	7	6	13	6	2	8	36	9	45	18	1	19
1868–'69	114	32	19	3	168	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	1	51	10	61	17	9	26	9	2	11	30	9	39	26	5	31
1869–'70	130	26	16	10	182	.....	1	1	.....	.....	.....	.....	.....	.....	1	.....	1	35	10	45	22	9	31	11	3	14	50	8	58	28	5	33
1870–'71	147	28	14	6	195	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	.....	2	52	10	62	24	9	33	4	2	6	51	11	62	30	3	33
1871–'72	120	38	22	6	186	.....	.....	.....	1	1	.....	.....	.....	.....	.....	.....	.....	54	14	68	18	8	26	9	5	14	33	7	40	28	10	38
1872–'73	130	37	23	14	204	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	49	13	62	26	12	38	2	5	7	44	15	59	32	6	38
1873–'74	165	28	27	10	230	1	.....	1	.....	.....	.....	.....	.....	.....	1	.....	1	84	12	96	18	11	29	4	1	5	50	7	57	36	7	43
1874–'75	155	37	24	14	230	.....	.....	.....	1	.....	1	.....	.....	.....	1	.....	1	65	12	77	30	13	43	5	3	8	48	10	58	31	13	44
1875–'76	136	37	30	10	213	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	2	3	59	18	77	29	9	38	.....	.....	.....	29	8	37	49	12	61
1876–'77	119	37	28	14	198	.....	.....	.....	.....	.....	.....	.....	1	1	1	1	2	51	18	69	26	13	39	2	2	4	39	9	48	29	9	38
1877–'78	109	31	29	13	182	1	.....	1	1	.....	1	.....	.....	.....	3	1	4	48	13	61	23	5	28	2	2	4	35	10	45	30	14	44
1878–'79	138	42	31	11	222	.....	.....	.....	1	.....	1	.....	1	1	3	.....	3	55	22	77	32	5	37	3	3	6	35	9	44	44	14	58
1879–'80	139	33	22	11	225	.....	2	2	1	.....	1	.....	.....	.....	3	.....	3	57	12	69	22	10	32	.....	4	4	43	9	52	59	9	68
1880–'81	135	51	26	11	223	3	.....	3	1	5	6	.....	1	1	4	2	6	54	12	66	20	15	35	1	3	4	30	11	41	56	21	77
1881–'82	151	59	27	10	247	22	5	27	12	4	16	.....	2	2	12	3	15	53	15	68	28	6	34	1	5	6	29	11	40	67	32	99
1882–'83	109	51	32	13	205	49	11	60	16	6	22	.....	.....	.....	13	7	20	49	11	60	16	6	22	.....	.....	.....	13	7	20	123	40	163
Totals	4,129	871	481	194	5,675	76	19	95	33	16	49	.....	6	6	46	17	63	2,044	301	2,345	625	189	814	123	60	183	1,063	276	1,339	755	239	994

NOTE.—Of the recoveries, one female not insane, admitted in 1881–'82, is included.

Table showing admissions, discharges, and deaths, with the mean annual mortality and proportion of recoveries; per cent. of the discharges, including deaths, for each year since the opening of the hospital.

Years.	Admitted.			Discharged.											Remaining June 30 in each year.			Daily average.			Percentage of recoveries on discharges.			Percentage of deaths on average numbers.			Percentage of deaths on total numbers under treatment.		
				Recovered.			Improved.			Unimprov'd.			Died.																
	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.
1855	26	37	63	.....	3	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	26	34	60	19.35	20.65	40.00	.....	100.00	100.00	.....	.....	.....	.....	.....	.....
1855-'56	36	11	47	3	2	5	.....	.....	.....	.....	1	1	5	3	8	54	39	93	41.20	37.98	79.18	37.50	33.33	35.71	12.13	7.09	10.10	8.06	6.66	7.48
1856-'57	25	27	52	2	4	6	3	1	4	7	3	10	8	8	16	59	50	109	54.55	42.80	97.35	10.00	25.00	16.66	14.66	18.69	16.43	10.13	12.12	11.03
1857-'58	29	14	43	13	5	18	1	1	2	2	.....	2	7	6	13	65	52	117	57.70	50.31	108.01	56.52	41.66	51.42	12.13	11.92	12.03	7.95	9.37	8.55
1858-'59	47	18	65	16	5	21	1	4	5	5	3	8	6	4	10	84	54	138	72.93	56.24	129.17	57.14	31.25	47.73	8.22	7.11	7.74	5.36	5.71	5.49
1859-'60	68	24	92	26	7	33	4	3	7	3	2	5	13	5	18	106	61	167	100.68	59.00	159.68	56.52	41.17	52.38	12.91	8.47	11.27	8.55	6.41	7.82
1860-'61	64	31	95	42	11	53	5	2	7	2	.....	2	12	7	19	109	72	181	109.76	64.81	174.57	68.85	55.55	65.43	10.93	10.80	10.88	7.06	7.61	7.25
1861-'62	174	12	186	96	8	104	14	1	15	.....	.....	.....	26	10	36	147	65	212	123.75	65.74	189.49	70.59	42.10	67.09	21.01	15.21	19.00	9.18	11.90	9.81
1862-'63	330	25	355	197	6	203	17	1	18	3	3	6	57	4	61	203	76	279	168.41	72.31	240.72	71.89	42.85	70.48	33.84	5.53	25.34	11.95	4.44	10.76
1863-64	484	25	509	282	6	288	69	1	70	5	.....	5	67	8	75	264	86	350	205.73	77.66	283.39	66.66	40.00	65.75	32.56	10.30	26.40	9.75	7.92	9.51
1864-'65	478	36	514	315	9	324	110	12	122	11	.....	11	139	8	147	167	93	260	277.42	83.81	361.23	54.78	31.03	53.64	50.10	9.54	40.69	18.73	6.55	17.01
1865-'66	194	28	222	104	5	109	20	7	27	10	1	11	41	12	53	186	96	282	190.92	90.70	281.62	59.42	20.00	54.50	21.47	13.23	18.82	11.35	9.91	10.99
1866-'67	88	21	109	45	7	52	11	3	14	11	1	12	19	14	33	188	92	280	189.66	89.46	279.12	52.32	28.00	46.85	10.02	15.65	11.82	6.93	11.96	8.44
1867-'68	120	33	153	49	15	64	6	2	8	5	1	6	22	5	27	226	102	328	221.17	96.44	317.61	59.75	65.22	60.95	9.95	5.18	9.50	7.14	4.00	6.23
1868-'69	133	35	168	59	11	70	9	6	15	8	2	10	24	9	33	259	109	368	244.55	108.03	352.58	59.00	39.28	54.69	9.81	8.33	9.35	6.70	6.57	6.65
1869-'70	146	36	182	32	8	40	16	8	24	11	3	14	15	3	18	331	123	454	294.69	108.08	402.77	43.24	36.37	41.67	5.09	2.77	4.36	3.71	2.05	3.27
1870-'71	161	34	195	50	12	62	21	7	28	4	3	7	32	11	44	384	124	508	354.34	121.66	476.00	46.30	36.36	43.97	9.31	9.04	9.24	6.70	7.00	6.78
1871-'72	142	44	186	43	8	51	16	13	29	8	1	9	37	7	44	422	139	561	407.21	131.57	538.78	41.34	27.59	38.34	9.09	5.32	8.16	7.04	4.17	6.34
1872-'73	153	51	204	49	15	64	23	5	28	3	5	8	32	13	45	468	152	620	431.03	144.11	575.14	45.70	39.47	44.13	7.42	9.02	7.82	5.56	6.84	5.88
1873-'74	192	38	230	67	12	79	22	8	30	6	3	9	39	11	50	526	156	682	492.44	151.36	643.80	50.00	35.29	47.02	7.92	7.27	7.76	5.91	5.79	5.88
1874-'75	179	51	230	66	9	75	28	22	50	8	3	11	51	7	58	552	166	718	536.46	164.17	700.63	43.13	21.95	38.66	9.50	4.26	8.27	7.23	3.38	6.36
1875-'76	166	47	213	67	17	84	26	10	36	1	.....	1	48	18	66	576	168	744	584.78	165.59	730.37	47.18	37.78	45.45	8.49	10.87	9.04	6.68	8.45	7.09
1876-'77	147	51	198	66	17	83	27	13	40	2	.....	2	45	7	52	583	182	765	587.41	176.30	763.71	47.80	45.94	46.89	7.66	3.96	6.80	6.22	3.19	5.52
1877-'78	138	44	182	49	11	60	32	9	41	3	4	7	37	9	46	600	193	793	596.82	184.37	781.19	40.49	33.33	38.96	6.19	4.88	5.88	5.13	3.98	4.35
1878-'79	169	53	222	68	24	92	30	7	37	3	1	4	51	12	63	617	202	819	619.10	196.70	815.80	44.73	54.54	46.93	8.23	6.10	7.72	6.63	4.87	6.20
1879-'80	181	44	225	38	14	52	23	10	33	.....	3	3	46	13	59	691	206	897	655.34	196.63	851.97	35.51	35.00	35.37	7.01	6.61	6.92	5.76	5.28	5.65
1880-'81	161	62	223	62	10	72	27	9	36	.....	6	6	63	18	81	700	225	925	685.37	211.38	896.75	40.78	23.25	36.92	9.19	8.51	9.03	7.39	6.71	7.23
1881-'82	178	69	247	62	21	83	31	8	39	2	5	7	74	27	101	709	233	942	697.10	232.88	929.98	36.69	34.43	36.08	10.61	11.59	10.86	8.43	9.18	8.61
1882-'83	201	64	265	76	19	95	33	16	49	.....	6	6	46	17	63	755	239	994	729.89	235.27	965.16	49.03	31.03	44.13	6.30	7.22	6.52	5.05	5.72	5.22
Total 29 y'rs	4,610	1,065	5,675	2,044	301	2,345	625	189	814	123	60	183	1,063	276	1,339															

Summary of total admissions.

	Males.	Females.	Both sexes.
ntage of cases recovered	44.34	28.26	41.32
ntage of cases improved	13.56	17.75	14.35
ntage of cases unimproved	2.67	5.63	3.22
ntage of cases died	23.06	25.02	23.69
ntage of cases remaining	16.37	22.44	17.51
	100.00	100.00	100.00

t will be seen that the number of admissions during the year ending e 30, 1883, was 265, which is in excess of that of any other year e the war, while the whole number under treatment, 1,207, is the est total of any year since the hospital was opened for inmates. s is mainly due to the fact that, in addition to the usual sources of ply, quite a number have already been received from the Home for abled Volunteer Soldiers, in accordance with the legislation of the Congress which provided for the care of that class of the insane at hospital. A considerable number of this class are detained at the me until the completion of the new buildings, it being simply im- sible to receive them in our present crowded condition.

he daily average number resident in the hospital has been a fraction ve 965. The number of recoveries reported is 94, while only 63 e died—a mortality equivalent to about 5¼ per cent. of the whole ber under treatment. The general health of the household has n good, and no epidemic disease has appeared. In view of the ad- ced age of so considerable a proportion of the inmates, so low a rate nortality can hardly be expected to continue.

he per cent. of recoveries, 44.13, is higher than for some years past, perhaps requires a word of explanation. Something, we hope, is to the open-air treatment, which has been liberally administered, we think more to the fact that an unusual number of acute cases urable forms of disease have been received.

eference to the table of those discharged recovered will show that duration of the disease on admission had been less than six months nore than two-thirds of the cases, and in nearly half of them it had ted only for a few weeks. Those reported as recovering after some rs were recurrent cases, the duration having been taken from the ement made at admission, and this properly applies to the whole n of recurrence rather than to the period of last attack. Many of se cases were cases of alcoholic insanity, belonging to the inebriate s, who did not present the evidence of continued insanity, and so ered no prolonged detention. They were certainly intellectually l when they left the hospital, however morally imbecile, or however n they may have returned to their cups.

he question whether the confirmed inebriate is an insane man may regarded as still *sub judice*, although the authorities of the District Columbia would seem by their frequent committals of this class to hospital to be satisfied of the identity of the two. It is much to be re- tted that Congress does not by distinct legislation define the legal tus of this unfortunate class, and provide a suitable reformatory for m distinct from the asylums for the intellectually insane on the one d, and apart from the lock-ups of ordinary criminals on the other—

an institution where they can be required to work, and can be detained long enough to offer some hope of their restoration to society as useful citizens. Infirm of purpose and infantile in will-power, they should be sent to moral-reform schools until that part of their nature has attained its majority, although with some of them the years of the psalmist would hardly suffice for this result. At present their lot is anything but happy, alternating as they do about equally between the work-house, the hospital, and the gutter, and alike out of place in each one of them.

Under the appropriation for fire-walls, fire-escapes, and greater protection against fires, seven solid walls have been carried up from the basement through the roof; the only openings in these, except in the basement, where the floor above is on fire-proof arches, are securely closed with tin-covered doors. These, with one remaining wall, which will be built during the present year, divide the main hospital building into nine, or, including the addition now building (with a fire-proof corridor connection), into ten sections. Five fire-escapes and one iron stairway, for use as an escape, have been placed on the outside of the buildings. The iron stairway affords a safe and easy means of egress from the dormitory of Atkins Hall. The fire-escapes consist of iron ladders made fast to the wall and extending to the roof, with iron platforms with protecting hand-rail bracketed from the wall at the level of the window-sills of each story. Alongside of this ladder a 3-inch standpipe is carried up, with hose attachments at each story, to the top of the battlements. While these escapes and stand-pipes—being out of doors, and hence free from suffocating and blinding smoke—will prove in case of necessity a valuable aid to firemen in fighting a fire, they can hardly be depended upon as a way of escape for many of the insane. The insane will instinctively take the customary avenues of egress, hence the importance of making the corridors and stairways fire-proof. As a protection to the present stairways, many of which are of wood, tin-covered fire-doors have been substituted for the ordinary doors at all the landings, and the brick walls dividing the stairways from the wards have been carried up solid to the roof. The interior stand-pipes have also been extended through the roof, and hose attachments, with ample hose, placed on the roof, the hose being protected from the weather.

With the changes in stairways and walls provided for in the appropriation for the present year, together with the fire-proofing of corridor floors (asked for in the estimates of this year), it is believed that immunity from any general conflagration and consequent terrible loss of life will have been fully secured.

Incidental to the erection of the fire-walls are a light, open corridor, separating the first and second sections west, together with a very satisfactory arrangement of bath-room, water and drying-closets, for the second section, in a tower by themselves. The improvement is so marked that a similar change will be made in constructing the remaining fire-wall between the first and second sections east.

Quite extensive additions to the hospital in order to provide accommodations for the insane from the Home for Disabled Volunteer Soldiers, commenced during the past year, will be completed in the present. These additions, erected under the supervision of Mr. Edward Clark, the Architect of the Capitol, are tasteful brick structures, carefully built and conveniently arranged, that will afford additional room for more than 200 patients. The principal building, known as the Home, is a part of the system of detached buildings for the insane, of which the Relief, described in a previous report, is one.

This new building, designed especially for the disabled volunteer soldiers, is built on a liberal plan, and will, it is thought, prove one of our most satisfactory buildings, but a detailed description may properly be deferred until its merits have been tested by occupation, which will be, in part at least, during the coming season.

Another structure just completed, known as the Rest, is designed for a mortuary. Here special arrangements have been made for the care and preservation of the remains of the dead until the wishes of friends, often distant from Washington, can be ascertained. In our warm climate some such provision is necessary, if the feelings of relatives and the rites of sepulture, that are held sacred by all, are to be considered. In addition to the room for the reception of friends, and the last services, the building has rooms for microscopic and pathological research, as well as photography. The need of such a building and the importance of this work has long been felt, and in the hands of a competent pathologist important results are to be hoped from its future work.

The problems of varied labor, diversion, and exercise for the inmates have continued to receive much attention. Life in the open air has been encouraged by the planting of shade trees, the erection of summer-houses, and the placing of settees about the grounds. To provide suitable walks for the female patients at those seasons when our stiff clay soil is converted into mud, paths of asphalt have been laid through pleasant places. In the mild season there is now but little excuse for any one to remain indoors, and to the insane, as to every one else, there is balm in the air and health in the sunshine.

Perhaps the greatest material achievement of the year has been the very satisfactory solution of the water question. The problem of an abundant supply of pure, wholesome water for a hospital of fifteen hundred souls and all the dependent life accompanying, a most vital one, and fraught with no end of practical difficulties, has, we believe, been satisfactorily settled, without incurring the great expense of laying a water-main under the river bed, by sinking a series of artesian or tubular wells near the pumping station at the river within the hospital grounds. As the work is somewhat novel, and the result a most important one, a brief statement of what has been accomplished may properly find place here. The extent of the hospital and the number of its inmates have for some time rendered a continuous night and day service of water necessary—a service whose source of supply should afford not less than a quarter of a million gallons daily. While no such amount is actually consumed in the twenty-four hours, there are certain hours in the day when the consumption is at the rate of 300,000 gallons daily, so that unless expensive storing reservoirs are built, the source of supply must be such as to be at all times capable of yielding that amount. This is for all the uses of the hospital. If the ordinary river water was pumped for flushing the closets, sprinkling lawns, and supplying the lake, a considerably smaller supply of pure water would suffice; but as a duplex system of tanks and pipes for the supply of water from distinct sources for different purposes in the same buildings is complicated and involves considerable additional expense, it was decided to attempt to supply the full amount from artesian wells.

Mr. J. E. Robinson, of Baltimore, Md., who had met with great success in the neighborhood of that city and elsewhere in obtaining a supply of water by means of tubular wells, was engaged to test the ground by sinking a well 1½ inches in diameter at the river side. The drill at the depth of 30 feet struck the old river-bed, a very compact clay, which was found to be almost 300 feet in thickness. This being pierced,

at the depth of 320 feet below the level of the surface of the river the drill entered a water-bearing vein of clear sand and gravel, from which the water rose in the pipe and flowed freely at the surface of the ground.

Analysis showing the water to be of extraordinary purity, Mr. Robinson was engaged to complete the work; and accordingly, within the area of about an acre of ground, eighteen 2-inch wells cased with 1½-inch iron pipe were sunk to a depth, with a single exception, varying from 325 to 350 feet, all apparently terminating in the same sand and gravel strata, and all flowing wells at the surface of the ground. The natural flow, before pumping commenced, exceeded 150,000 gallons per day. By a system of pipes laid beneath the surface of the ground, the water is brought through a patent sand-chamber into the common reservoir. This is a cylinder of boiler-iron, which occupies the center of the old well in the pump-house from which the river water was formerly pumped. As a safeguard in case of fire the old suction-pipe from the pumps is left undisturbed in its river connection, but closed off by a valve. A suction-pipe carried from the opposite side of the pump, terminating in the iron cylinder, takes the artesian-well water. The pipes from these wells are so arranged that they deliver the water either by siphonage or pumping. The former method supplies all the water needed for the night service, and if more is required by day it is obtained by pumping. By draughting the water 10 feet below the tide-level 300,000 gallons per day can be obtained, which is the full amount thus far required. By pumping the wells to a lower level proportionally more water could be obtained should it ever be needed. The water flowing from the wells has a uniform temperature of 51° F. The analysis made soon after the wells were opened, by Dr. Peter Collier, chemist of the Department of Agriculture, together with that distinguished expert's opinion of the character of the water, will be found in the following letter:

UNITED STATES DEPARTMENT OF AGRICULTURE,
Washington, D. C., March 30, 1883.

Dr. W. W. GODDING:

SIR: I send inclosed the complete analysis of the larger sample of water received from you. The smaller sample is practically the same water. It will be seen that these results fully sustain the conclusions arrived at in the preliminary examination of the water and show conclusively the very high character of the water analyzed. The smaller sample, A, as I have said, is obviously from the same source as the larger sample, B, and I see no reason for excluding it from the common supply.

The following analysis gives the composition of the sample B in grains per gallon of 231 cubic inches:

	Grains.
Soda	.8893
Potassa	.5800
Lime	1.1156
Magnesia	.9633
Alumina and iron oxide	.4374
Chlorine	.4184
Sulphuric acid	.5306
Silica	.7593
Carbonic acid (combined)	2.2491
Total	7.8920
Deduct oxygen for the equivalent of chlorine	.0943
Solid matter per gallon	7.7977

In the above analysis it is plain that the lime and magnesia, as also iron carbonates, are held in solution by free carbonic acid present in the water. The silica includes, also, the insoluble mineral matter which is present and gives a slight cloudiness to

the water similar in character, though not equal in degree, to that seen in the unfiltered water from the Potomac. The mineral matter in the water is probably combined as follows:

Grains in one gallon, 231 cubic inches.

	Grains.
Sodium, chloride, Na CL	.6895
Potassium, sulphate, $K_2 SO_4$	1.0901
Sodium, sulphate, $Na_2 SO_4$	.0522
Sodium, carbonate, $Na_2 CO_3$	.7541
Calcium, carbonate, $Ca CO_3$	1.9921
Magnesium, carbonate, $Mg CO_3$	2.0229
Alumina and iron oxide, $Al_2 O_3 Fe_2 O_3$	.4374
Silica, $Si O_2$	.7593
Total mineral matter	7.7976

You will observe that every detail of the analysis points to the fact that this supply is obtained from a source entirely independent of anything like surface water or infiltration from the river.

The especial points which to my mind appear to establish this important conclusion are as follows:

1. The comparative absence of chlorides and abundance of carbonates. (I speak only relatively, of course, since the amount of mineral matter is absolutely low.)

2. The large amount of potassium as compared with the sodium present, showing that this water cannot be filtered from the river, since the river water contains practically no potassium but chloride of sodium.

3. The small amount of ammonia and albuminoid ammonia (as shown below) as compared with what by general consent is regarded as a most excellent water, viz, the Potomac water supplied to the city.

From a sanitary standpoint the amount of ammonia compounds present in a water is of extremest importance.

In the sample B was found: Free ammonia, .006 part in 1,000,000; albuminoid ammonia, .005 part in 1,000,000.

For purposes of comparison the result of the analysis of the Potomac water is here given, the determination having been made by the same method: Free ammonia, .016 part in 1,000,000; albuminoid ammonia, .050 part in 1,000,000.

It will be seen therefore from the above results that you have succeeded in securing a most excellent water supply for the hospital.

Sincerely yours,

PETER COLLIER.

So, then, at a total cost of less than $6,000, leaving over $9,000 of the appropriation designed to bring the Potomac water across the river unexpended, we have obtained an abundance of soft potable water, ten times freer from organic matter than that furnished the city, and drawn, as it is, from a depth of more than 300 feet below the level of the ocean, we may fairly consider the supply to be inexhaustible.

To bring back into the sunlight such a fountain for the use of man from the hidden channels where through all the centuries it has gone unheeded to the sea is a benefaction; it is the restoration of a lost wealth to the world.

The following table shows the result of the year's farming:

Farm and garden products.

Apples, 90 bushels, at 75 cents	$67 50
Asparagus, 2,617 bunches, at 6 cents	157 02
Beans (lima), 125 bushels, at $1.25	156 25
Beans (string), 397 bushels, at 75 cents	297 75
Beef (fresh), 10,604 pounds, at 9 cents	954 36
Beets, 244 bushels, at 40 cents	97 60
Blackberries, 297 quarts, at 8 cents	23 76
Cabbages, 27,381 heads, at 6 cents	2,042 86
Cantaloupes, 10,306, at 5 cents	515 30
Carrots, 3,055 bunches, at 3 cents	91 65
Celery, 33,706 heads, at 5 cents	1,685 10

Cherries, 560 quarts, at 8 cents	$44 80
Chickens, 15 dozen, at $4.50	67 50
Corn (green), 869 dozen, at 15 cents	130 35
Cucumbers, 3,713, at 1 cent	37 13
Currants, 982 quarts, at 12½ cents	122 75
Ducks, ½ dozen, at $6	3 00
Eggs, 2,677 dozen, at 25 cents	669 25
Egg-plants, 2,447, at 5 cents	122 35
Figs, 62 quarts, at 20 cents	12 40
Geese, 2, at 75 cents	1 50
Grapes, 19,075 pounds, at 5 cents	953 75
Kale, 378 bushels, at 50 cents	189 00
Leeks, 21,752 bunches, at 3 cents	652 56
Lettuce, 9,550 heads, at 3 cents	286 50
Milk, 57,310½ gallons, at 26 cents	12,300 73
Onions, 6,732 bunches, at 2½ cents	168 30
Parsley, 5,455 bunches, at 3 cents	163 65
Parsnips, 433 bushels, at 85 cents	368 05
Peaches, 192½ bushels, at $1.50	288 75
Pears, 26½ bushels, at $1	26 50
Pease, 506 bushels, at $1	506 00
Peppers, 3,473, at 1 cent	34 73
Pork, 43,313 pounds, at 10 cents	4,331 30
Potatoes (Irish), 383 bushels, at 70 cents	268 10
Potatoes (sweet), 310 bushels, at 55 cents	170 50
Pumpkins, 108 cart-loads, at $2	216 00
Quinces, 68 bushels, at $3	204 00
Radishes, 1,204 bunches, at 2½ cents	30 10
Radish (horse), 364 pounds, at 8 cents	29 12
Rhubarb, 902 bunches, at 2½ cents	22 55
Spinach, 20 barrels, at $1.50	30 00
Squash (summer), 6,364, at 2½ cents	159 10
Squash (winter), 60 barrels, at $1	60 00
Strawberries, 4,858 quarts, at 10 cents	485 80
Tomatoes, 988 bushels, at 55 cents	543 40
Turnips, 1,364½ bushels, at 40 cents	545 80
Veal, 68 pounds, at 10 cents	6 80
Watermelons, 40, at 12½ cents	5 00
Sale of stock, pigs, calves, &c	651 80
	30,998 07

The following products, which were consumed on the farm, are consequently not a part of the profits:

Corn-fodder (green), 16 acres, at $35	$560 00
Corn-fodder (dry), 50 tons, at $12	600 00
Grass (green), 5 acres, at $35	175 00
Hay, 180 tons, at $15	2,700 00
Oats (fodder), 15 tons, at $12	180 00
Rye (green), 3 acres, at $30	90 00
Rye (straw), 25 tons, at $12	300 00
Wheat (green fodder), 3 acres, at $35	105 00
Corn, 250 barrels, at $3	750 00
Total	5,460 00

The result is creditable to the management of the farm steward and his laborers, and compares favorably with previous years.

The endeavor has been to estimate the value at what the same products would have brought in open market. The advantage which the hospital realizes over buying in open market is that the fruits and vegetables are gathered fresh for the table, and are not withered and wilted by a long transit, and that the milk is drawn from one source, and that not artesian. Outside of this the farm is now a source of moderate income to the hospital, and might even be extended with advantage to the inmates. Green fields make inviting surroundings to the buildings,

and a walk past growing crops gives a pleasing variety to the eye which does not tire.

ESTIMATES FOR THE FISCAL YEAR ENDING JUNE 30, 1885.

For the support, clothing, and treatment in the Government Hospital for the Insane, of the insane of the Army, Navy, Marine Corps, the Revenue Cutter Service, and the United States convict insane; also for all persons who have become insane since their entry into the military or naval service of the United States, and the indigent insane of the District of Columbia, $258,750.

The basis of this estimate is $225 per annum for each inmate, and is made on the supposition that the average number will not exceed 1,150.

Congress has for some years past made provision for a part of this expense in the bill for the District of Columbia; and in view of the gradual increase in the number of the indigent insane from the Dsitrict under treatment in the Hospital, the amount in that bill has, from year to year, been increased.

The amount for the fiscal year ending June 30, 1884, is $46,700. Should Congress see fit to augment in the same ratio as hitherto, the amount in the District bill will be $50,436, leaving the sum of $208,314 to be appropriated in the sundry civil bill.

2. For general repairs and improvements, $10,000.

This is the sum which has been appropriated for this purpose for several years past, and is needed annually to preserve the property and keep everything in good working condition.

3. For special improvements, viz, a barn for stock and the storage of farm products, $5,000; for green-house and cold grapery, $3,000; for cottages on the out-farm, $2,400; to continue the protection from fire, $5,000; in all, $15,400.

We very much need an additional barn for the storage of crops and the shelter of our stock. From necessity much of the hay cut on the farm is now standing in stacks, exposed to the storms, while a portion of the cattle are stalled in sheds and temporary structures, which, while they are the best we have, are entirely inadequate and ill-suited to the needs of the growing herd.

It is not boasting to say that the United States have here as fine a stock for dairy purposes as can be found within the limits of the District of Columbia. These are not herd-book animals purchased at extravagant prices, but are for the most part high grades of Alderney cows, which have been raised on the hospital farm. Milk, as an easily assimilated form of nourishment for persons enfeebled by age and mental disease, has no substitute. With proper farm buildings a daily supply of two hundred gallons of milk can be drawn from this dairy farm. Is there any good reason why the United States should not provide for its wards as any thrifty farmer would do for himself? Why carry no the farm at such obvious disadvantage? A suitable barn, with brick basement, can be built for $5,000.

An appropriation of $3,000 is asked for a cold grapery, forcing and green house.

It is a well-established fact in the treatment of the insane that pleasant surroundings do much, by diverting the thoughts to external objects, to restore the mind. In this direction a moderate expenditure for a building for the preservation and propagation of bedding-plants to adorn the hospital grounds in summer, and now and then brighten the winter in our wards with a rose or a bunch of grapes, will be found to

be in the interest of economy and in accord with the most advanced ideas in the care of the insane.

Two small cottages for employés are needed on the out-farm, at points where we are exposed to depredations unless a watch is kept during the season of growing crops. Also one in the neighborhood of the cemetery for the person in charge. Inexpensive structures, tasteful in appearance and affording comfortable quarters enough, can be built for the amount of the estimate.

The sum of $5,000 is asked to increase the protection against fire in renewing corridor floors in the main hospital edifice.

In the additions now being built, iron beams, with brick arches, have been substituted for flooring joists in the hall-ways, thus rendering the passages practically fire-proof. Several of the floors in the old building now need renewing, and in doing this it is desirable to substitute the fire-proof arch for the ordinary flooring support in the wards, thus affording a safe way of escape in case of fire. The sum asked will be sufficient to make this change so far as the floors are now in a condition to require renewal. Others can be changed in this way as they may require.

Since the date of the last report, the Board of Visitors, in common with a circle of friends which his ability and his work, notably that in connection with the Medical and Surgical History of the War, had made world-wide, have been called to mourn the loss of Dr. Joseph K. Barnes, late Surgeon-General United States Army. General Barnes was at the time of his death president of the Board and its senior member in the length of his term of service. His deep interest in the welfare of the hospital, extending as it did over a period of many years, is well known, and to the Board of Visitors and the officers of the institution his death was like a personal bereavement. This is not the place for extended eulogy, but the resolutions passed by the Board at a special meeting, called soon after his death and that of Dr. James C. Palmer, late Surgeon-General of the Navy, and a former member of the Board, may properly find record here:

At a special meeting of the Board of Visitors, held at the parlors of Dr. Toner April 30, 1883, the following resolutions were unanimously adopted:

Whereas this Board has been called to meet in extraordinary session that it may render a proper tribute of respect to the memory of its late president and oldest member: Therefore,

Be it resolved, That in the death of Dr. Joseph K. Barnes, late Surgeon-General of the United States Army, and the presiding officer of this Board, whose decease occurred on the 5th of April, 1883, the Government Hospital for the Insane has lost a wise counselor and a constant friend, upon whom the members of the Board, in common with the officers of the institution, had learned to lean, with implicit confidence not only in his high professional intelligence and administrative ability, but also in the provident care, the painstaking fidelity, and unselfish philanthropy which, under the pressure of manifold and exacting public duties, he never relaxed for an instant in his benevolent solicitude in behalf of the patients gathered within our hospital walls.

Resolved, That while the Army Medical Museum, which he founded, will stand, and deserves to stand, as an enduring monument to the memory of General Barnes in the eyes of his countrymen, and while the many learned and useful publications of which he was the enlightened projector and public-spirited superintendent will transmit his fame to future generations wherever medical science and art shall have their votaries, we crave for ourselves the privilege of mourning the loss of the personal friend, the energetic associate, the efficient executive officer, and the humane public servant, whose love of mercy descended to the humblest services in behalf of his afflicted fellow-men, as in other spheres he rose to the highest calls of public duty in those grave conjunctures which came again and again to tax his professional skill in the sight of the whole nation.

Resolved, That these resolutions be entered on the minutes of the Board, and that a copy of them be sent to the family of our late colleague in testimony of our sincere condolence in their private sorrow.

At the same meeting the following resolutions were also unanimously passed:

Resolved, That in the recent death of the late Surgeon-General James C. Palmer, United States Navy, whose decease occurred on the 24th of April, 1883, we mourn the loss of a former esteemed and beloved member of the Board; that we condole with his associates in the naval service, to whom he was endeared by his kindness of heart, genial disposition, and eminent professional skill and acquirements.

Resolved, That we unite in sorrow with his bereaved family, and that a copy of these resolutions be forwarded to them.

The Parking Commission of the District of Columbia have our sincere thanks for a very liberal donation of five hundred shade-trees for the beautifying of our grounds. These have been planted beside the recently made walks and roads, or grouped about the new buildings, where there is still room for more.

To Miss E. N. Gadsby we are indebted for a labor of love with selected cases among our female patients to interest them in the use of the health-lift; also for valued instruction to our nurses in the intelligent use of the same. This mode of exercise and treatment probably deserves more attention than it has received in our hospitals, and when it finds so earnest an advocate as Miss Gadsby the enthusiasm is contagious, and some good is sure to crown the effort, however much it may fail of success in other hands.

From Mr. J. E. Robinson we have received a gift of $20 to purchase slides for our lantern, which has been expended in increasing this permanent fund of entertainment.

To Professor Sousa and the Marine Band we are again indebted for delightful out-of-door concerts, much enjoyed by all.

E. B. Hay, esq., and other dramatic and musical friends, are gratefully remembered by our household for pleasant winter evening memories.

Mr. Dallas, of the Dead Letter Office, has favored us with newspapers, valentines, and Christmas cards, which went wrong to come right at last.

To the ladies who have brought us flowers; to the florists who gave us cuttings and bedding plants when our little glass house (which was our all in this direction) was burned out; and to all who, though not personally mentioned here, have helped us by word or deed, we would make due acknowledgment.

The year has brought but few changes. Dr. Foster, who had been for two years in charge of the female wards, and whose health had become somewhat impaired, left us early in the autumn of last year to attend to private business and engage in general practice. Dr. Foster was a thorough student, kind and conscientious; he was doing good work here, and bid fair to take high rank in the specialty. It is to be hoped that the change of climate will entirely restore him, and that he has not permanently abandoned a field for which he seemed in many respects admirably fitted. Wherever he goes he carries our best wishes for his future welfare.

Dr. Lyon has succeeded to the care of the female wards, and Dr. Patterson has been advanced from the night service to the post of third assistant physician.

Dr. J. C. Simpson, of Pennsylvania, who has succeeded Dr. Patterson as night medical inspector, is a graduate of the medical department of the University of Pennsylvania, comes to us warmly recommended, and has devoted himself faithfully to the work.

The medical staff is composed of young men of talent, integrity, and ability, and their growing experience, year by year, renders their services

more valuable to the hospital, and is fitting them for wider spheres of usefulness in the future.

We believe the hospital was never doing better work than at present, and with all its important trusts and dependent inmates we again commend it to the nation's care.

We are, very respectfully, your obedient servants,

J. M. TONER,
President.
W. W. GODDING,
Secretary ex officio.

Hon. H. M. TELLER,
Secretary of the Interior.

REPORT OF THE COLUMBIA INSTITUTION FOR THE DEAF AND DUMB.

COLUMBIA INSTITUTION FOR THE DEAF AND DUMB,
Kendall Green, near Washington, D. C., October 30, 1883.

SIR: In compliance with the acts of Congress making provision for the support of this institution, we have the honor to report its progress during the year ended June 30, 1883:

The pupils remaining in the institution on the 1st of July, 1882, numbered	66
Admitted during the year	28
Since admitted	12
Total	106

Under instruction since July 1, 1882: Males, 89; females, 17. Of these 41 have been in the collegiate department, representing 18 States and the Federal District, and 65 in the primary department. A list of the names of the pupils connected with the institution since July 1, 1882, will be found appended to this report.

HEALTH OF THE INSTITUTION.

General good health has prevailed in the institution since the date of our last report. No pupils have died and the cases of illness which have occurred, comparatively few in number, have yielded readily to treatment.

COURSES OF INSTRUCTION.

The work of instruction in the several departments of the institution has proceeded as in recent years. Besides the intellectual courses, the success in which has been highly satisfactory, instruction has been given in articulation to nearly two-thirds of the pupils of the primary department with very gratifying results. Special physical training has been afforded all the older pupils in the gymnasium, and an opportunity to acquire a knowledge of carpentering and cabinet-making was afforded to such boys in the primary department as were capable of profiting thereby.

LECTURES.

Lectures have been delivered during the year by the professors and instructors in the two departments as follows:

To the students of the collegiate department:

The Brotherhood of Nations. President Gallaudet.
The Inductive Method in Science. Professor Porter.
Origin of Civilization. Professor Fay.

Astronomy. Professor Chickering.
Man Superior to the Law of Natural Selection. Professor Gordon.
Marshal Von Blucher. Assistant Professor Hotchkiss.
Ænidos, Liber Quartus. Assistant Professor Draper.

To the pupils of the primary department:

The Treason of Arnold. By Mr. Denison.
Life and Character of George Washington. By Mr. Ballard.
Life and Character of Abraham Lincoln. By Mr. Kiesel.

EXERCISES OF PRESENTATION DAY.

The exercises of the regular public anniversary of our collegiate department took place on the 16th of May.

The occasion was honored by the presence of the honorable Secretary of the Interior and other representatives of the Executive Department of the Government, Justices of the Supreme Court, and members of the Diplomatic Corps, and many distinguished citizens.

The exercises were opened with prayer by the Rev. William A. Bartlett, D. D., pastor of the New York Avenue Church. The candidates for degrees presented essays as follows:

Dissertation.—Physical Culture for this Country. Charles Clifford Griffin, District of Columbia.

Oration.—Maria Theresa. Harry Reed, Wisconsin.

Dissertation.—Addison as a Humorist. Thomas Francis Fox, New York.

Oration.—Early Home Training. James Lewis Smith, Minnesota.

MEMORIAL OF THE LATE PRESIDENT GARFIELD.

At this stage of the proceedings the president of the college informed the audience that a marble bust of the late General Garfield, patron of the institution during his Presidency of the United States, had been recently placed in the hall and would presently be unveiled. He called the attention of the audience to the following statement from the Garfield Memorial Committee, copies of which had been distributed:

The bust of the late President Garfield, to-day unveiled, is presented to the college by the deaf people of the United States and a few of their friends.

These people have wished to place this memorial here in honor of the warm interest and intelligent and effective support which Garfield constantly gave throughout his long public career to the cause of their higher education. They have a strong affection for his memory, because his interest in their elevation was so entirely apart from the ordinary interests of a political career; because he based his support of their claim to education upon broad grounds of public good, and not upon that mistaken conception of their condition which makes them mere objects of charity. He being thus distinguished, and, at the same time, sharing with all the friends of the deaf the sympathetic promptings of a warm and generous heart to aid those who are waging an unequal conflict with the world, it is but natural that the deaf people of the land should have added to their admiration and gratitude, as citizens, for the work of a wise and conscientious statesman, the deeper and more enthusiastic feeling for an appreciative friend.

Answering quickly to the dictates of this feeling these people suggested in their public prints, soon after President Garfield's untimely death, that it would be appropriate for them to place some memorial of their distinguished friend within the precincts of this college, whose halls had so often been honored by his presence and resounded to the echo of his broad-minded, large-hearted words. This suggestion, spontaneous in itself, was but the public expression of a strong desire for some memorial of the kind already existing among the faculty and students of the college; and its frequent reiteration by the deaf people at large induced the faculty to announce that it would receive subscriptions up to $1,200, wherewith to place a bust of Garfield in the chapel hall.

The response from all parts of the country was so immediate that within nine

months the committee was compelled to decline further subscriptions, as more than the amount asked for had already been received.

The execution of the bust was intrusted to Mr. Daniel C. French, an artist whose name is a guarantee of the excellence of his work; and that work is now before us, a memorial for future years of the man whose greatness but made him the more mindful of the silent people who to-day show their love in doing honor to his memory.

To show how widespread is the feeling of the deaf to which we have referred—how the North and the South, the East and the West have joined in placing the memorial in this hall—we give the distribution of the subscriptions by States. The names of some States do not appear, because, having no schools for the deaf, they send such children to the schools of neighboring States. Still other States were shut out by the prompt and liberal response of those whose names are given.

Very many of these subscriptions, running up into hundreds, were of one cent each; the great majority were of one dollar or less; few exceeded five dollars. The number of individual contributors amounts to more than two thousand.*

RECEIPTS FROM TWENTY-SIX STATES AND THE DISTRICT OF COLUMBIA.

1. California	$50 00	16. Mississippi	$15 10
2. Colorado	5 00	17. Missouri	39 00
3. Connecticut	31 15	18. New York	447 29
4. District of Columbia	191 60	19. Ohio	138 88
5. Georgia	15 60	20. Pennsylvania	184 86
6. Illinois	77 00	21. Rhode Island	12 00
7. Indiana	13 61	22. South Carolina	17 15
8. Iowa	45 47	23. Tennessee	18 25
9. Kentucky	12 64	24. Texas	31 85
10. Louisiana	1 00	25. Vermont	3 25
11. Maine	1 00	26. West Virginia	5 00
12. Maryland	30 35	27. Wisconsin	12 12
13. Massachusetts	34 50		
14. Michigan	6 70	Total	1,461 52
15. Minnesota	25 15		

JOHN B. HOTCHKISS,
AMOS G. DRAPER,
THOS. H. COLEMAN,
T. FRANCIS FOX,
SAMUEL S. HAAS,
PHILIP J. HASENSTAB,
OLOF HANSON,
Committee.

The president of the college then introduced Mr. E. A. Hodgson, of New York City, editor of the Deaf Mutes' Journal, who delivered the following address:

MR. HODGSON'S ADDRESS.

We meet to-day to dedicate an humble tribute to a noble man, to commemorate the earnest aid and zealous friendship of James A. Garfield to the deaf and dumb.

This memorial represents the loving remembrance and silent homage of many thousand grateful hearts.

Garfield was the champion of our educational rights. He understood the lamentable helplessness of the untaught deaf-mute, he knew that although deafness might be an impediment it was not a barrier to the acquisition of knowledge, he recognized the fact that the loss of the sense of hearing did not impair the intellectual faculties, and he ever lent his powerful aid to place within the grasp of the deaf and dumb the means of obtaining the highest education that their abilities would permit.

* To make up this aggregate there were one thousand four hundred and forty-seven actual subscriptions, the remainder being made up through the agency of six societies, two lectures given by graduates of the college, and a contribution from the officers and pupils of an institution where no names were furnished.

Mr. H. P. Arms, of Philadelphia, a deaf lithographer, who has until recently been connected with the Pennsylvania Institution for the Deaf and Dumb as an instructor in his art, has agreed to furnish at his own expense one thousand copies of a lithograph of the memorial to be distributed among the contributors, and it is proposed to purchase with a portion of the unexpended balance of the fund additional impressions of the lithograph, so that each subscriber whose name is known may receive a copy.

There was a time when no one believed it possible to impart knowledge to the deaf. The avenue of communication, the ear, being closed, it was a problem how to get at the understanding. In an uneducated condition, life to the deaf-mute is almost without meaning. The eye sees, but the mind fails to comprehend—the powers of conception cannot be exercised, the reasoning faculties are not brought into play. There is no idea of God, no knowledge of the promised hereafter, no hope beyond the fleeting shadows of to-day. Seventy years have not yet elapsed since all the deaf and dumb of America were in this black darkness of ignorance. But one day a noble man, the father of the president of this college, met and was touched by the forlorn condition of a little deaf and dumb girl, who stood apart from her companions, unable to participate in their merry games or share their happy laughter, and looked on with sad and wistful eyes. He approached her, and by degrees and through ingenious expedients succeeded in reaching her understanding, and from that day his sympathies and services were enlisted in the cause of the deaf and dumb. Hearing that methods were in vogue in Europe by which the deaf might be taught, he sailed for that continent, and although attempts were made to frustrate him in the accomplishment of his mission, at last succeeded in becoming possessed of the secret system which was to unlock so many minds. He returned to this country, bringing with him an educated deaf-mute from France, and on the 15th of April, 1817, began to teach the first class of deaf-mutes, numbering seven. This was the beginning of the first institution for the instruction of deaf-mutes in America. At the present day there are fifty-five institutions, with an aggregate of over 6,000 pupils, and since that humble beginning over 23,000 deaf-mutes have been taught and have enjoyed the blessing of an educated mind.

Such, in brief, is the origin and development of deaf-mute education in this country; but through all the years that followed the initial effort, not one day has passed unmarked by an expenditure of toil and thought and talent to enhance our educational welfare.

Although the best methods that ingenuity and study can devise are practiced in the instruction of the deaf and dumb, it is by no means easy to educate them. The discouragements and disadvantages encountered are unknown and unrecognized by the great majority of people. Only a few even of the learned and intelligent have seen and understood the amount of individual effort and labor and patience and skill required, and foremost among this number was our martyr President. In his native State, Ohio, he at all times showed great interest in the education of the "silent class," and when this college was struggling against public disregard and individual prejudice then was Garfield's voice raised loud in its behalf. He did not plead for us as a class of unfortunates having a lien on public sympathy. He maintained that it was not only right and just, but would be an act of wise legislation to give to the deaf and dumb the opportunity for becoming possessed of a higher education than the primary institutions afforded. Is it any wonder that the deaf and dumb loved and respected, honored and revered the man who thus voiced their wants and fought for the enlargement of their educational privileges? And when the news flashed through the land that Garfield was laid low, when stern-visaged men and white-faced women repeated the sad intelligence with sorrowing dismay, only God knew how keen the grief, how deep the sorrow felt by those upon whose lips His hand had placed the seal of silence. Throughout his long illness many a silent chorus of unvoiced prayers went up to heaven asking that God would spare our President and our friend. With tender sympathy in their hearts they stood with the world of humanity around his bedside, watching with pitying admiration the brave but unequal struggle, and joined in the earnest sigh of sorrow that circled round the world when his great heart had been forever stilled.

> "The willow bends unbroken when angry tempests blow,
> The stately oak is levelled, and all its strength laid low;
> So fell that tower of manhood, undaunted, patient, strong,
> Who with brave heart and courage kept back grim death so long."

When it was suggested to raise a fund for a memorial I need not mention how willingly and quickly the deaf and dumb responded. Suffice it to say that in a very short time the committee were reluctantly compelled to announce that no more subscriptions would be received, and thus to stop the steady flow of offerings that were swelling the amount far above the estimated necessity.

Here in this college to whose success he so largely contributed, here in this hall which has echoed with the music of his voice, here where he has clasped hands with his silent friends and spoken words of encouragement and inspiration, we place this modest but enduring tribute of our love and praise. It will prove an instructive reminder to all who may enter here. Step by step it will recall the story of his life. It will picture the rude home and frugal fare of his childhood, when he did the household work and helped his toiling mother; it will recount the sturdy independence of the barefooted boy who tramped along the towpath many a weary mile; it will reveal the indomitable courage and perseverance of the young man who studied and worked

and paid his way through a school and a collegiate education; it will speak of his energetic and conscientious labors as a teacher and as president of Hiram College; it will call to mind the hero of Chicamauga, when as a gallant soldier and patriot he fought for the honor of his country; it will record his honorable and serviceable career in the Congress of our nation; it will portray the great meeting of representative Republicans in Chicago, his unexpected and enthusiastic nomination for President of the United States, his subsequent glorious victory, and, last of all, his sad, sad death.

Long may it remain, keeping the name and fame of James A. Garfield ever fresh and green, carrying with it lessons of truth and virtue and heroic courage, and speaking to future generations of the deaf and dumb in the language which they can best understand—the language of silence.

The president of the college then introduced Mr. Robert Patterson, an instructor in the Ohio Institution for Deaf-Mutes, at Columbus, and a graduate of this college in 1870, who delivered the following address:

MR. PATTERSON'S ADDRESS.

We are aware that it is beyond our power to heighten the luster of Garfield's glory, or to add to the universal sense of his greatness by anything that we can say or do here. All the world has bowed in homage to his name, and the voice of eloquence has pronounced his highest praise. The pen of history will embalm his deeds in "the eternal drama of humanity," and the genius of art will ever be evoked to perpetuate his form and features and render them "a precious seeing to the eye."

Still, is the desire idle and presumptuous which seeks to do honor to his memory on this day, on this spot, and in the presence of this audience? Does not the proof of the true greatness of a man lie in this, that each fresh eulogy of him brings forth praises that have not been sung before, and that each monument reared to his memory is born of a different impulse?

This tribute of affection which we, on this occasion, tender to Garfield, and the bust of him which we have met to place in the custody of this seat of learning, are offered not so much to the memory of Garfield, the soldier, or to Garfield, the statesman, or to Garfield, the President, as to *Garfield the friend of the deaf and dumb and the champion of the National Deaf-Mute College.* As patriots, we are proud of the achievements of the soldier; as citizens of this glorious Union, we admire the abilities of the statesman and revere the dignity of the President; but as students and alumni of this college, we love the friend who loved it, and are grateful both for his faith in it when it was trembling in the balance as an experiment and for his noble protection of it when its very existence was threatened.

It is a remarkable fact that this college was brought into existence at a time when the nation was struggling in the throes of a great civil war. And not less remarkable is it that when it stood in need of a champion in the halls of Congress, Garfield was there to aid it with all the strength of his enthusiastic nature. Who knows that but for the wonderful activity of the human mind which was developed during that terrible war this college would not have been delayed much longer? And who doubts that but for Garfield it would have encountered greater obstacles?

It would now be an ungracious task to review the skepticism, the derision, and the animosity which attended the inception of the college. When we compare the obstacles that lay in its path with ultimate triumph, the heroic struggle with the victory, we can but thank God that He intrusted the interests of the college to the hands of one who possessed the ardor and pertinacity of an enthusiast combined with the patience and foresight of a practical teacher to make it a success; and we thank Him also that He gave to the college, in the person of Garfield, a friend who stood by it in its infancy, and who, in the midst of its adversity, stood shoulder to shoulder with its youthful president, as he was bravely bearing it onward, and whispered in his ear,

> "Bate not a jot
> Of heart or hope; but still bear up and steer
> Right onward;"

and stood ready to help him bear it up and on to the prosperity seen here and all around us to-day.

Let it not be thought that it is meant in this connection to undervalue the friendship and services rendered the college by other friends; very far from it. Who can ever forget what Amos Kendall, of blessed memory, did for the college? Who does not remember what Thaddeus Stevens, of Pennsylvania, Rufus P. Spalding, of Ohio, and George F. Edmunds, of Vermont, accomplished in its behalf? They all did nobly, and their names are engraved upon the tablets of our memories as in letters of gold, and will always be linked with the history of the college. But to Garfield we dedicate the honors of this hour, because he ever proved a true friend to the deaf. Though

engrossed with the cares of state while holding an arduous and responsible position in Congress, he still found time and opportunities to espouse the cause of our education; while occupying the highest position in the land with its correspondingly manifold cares and responsibilities, he still retained his lively interest in the college. Such disinterested devotion in high places is so rare that it surely merits the highest praise and gratitude we are capable of giving.

Garfield's first visit to the college was made in 1865, after it had been in operation but one year. Was it curiosity that attracted him hither? Had he not been long before familiar with the deaf and dumb? Let us go back to the time when he was in the Ohio State senate; let us follow him in his by no means unfrequent visits to the Institution for the Deaf and Dumb at Columbus; let us see with our mind's eye the enthusiasm and interest which burned in his teacher's soul as he passed from one school room to another, and the admiration, enjoyment, and intelligence which shone out of his scholars' eyes as he drank in the droll pantomime of one and the graceful and dignified signs of another; let us watch the zeal with which he participated in the social parties, in the girls' humble sitting room—not even that unlucky collision with a post in the room, which cut a gash above the eye and drew blood, could dampen his ardor; let us go farther, and behold him among the boys on the playground, measuring his strength at the wicket bat with them—not even the gaze of the dignified Salmon P. Chase, who was wont to pause in his daily passing to and fro, could make him think of beating a retreat.

Is it not more natural than wonderful that when Garfield came to the national House of Representatives, and found that there was an institution for the deaf and dumb in the District of Columbia he should have sought it out? And when he saw that there was a collegiate department in connection with it, and had listened to the earnest arguments of its president, is it to be wondered at that he gave his heart to the cause? Was it mere sentimentality that impelled him so to do? The long fifteen years he stood by the college when it was in its infancy, when it came down, as it did, into the depths of trial, when its enemies spoke of it in open derision, when lukewarm friends grew cold towards it; the pride and joy he felt in its success—let these answer!

To Garfield's farseeing vision the college prophesied the future uplifting of the deaf. He looked beyond the physical infirmity of deafness into the depths of the soul, and recognized only the elements of a common humanity; he beheld, with intuitive wisdom, that the sensitive principle of the body needed only to be warmed, quickened, and strengthened by a higher education than that afforded by the State institutions, to be capable of enjoying the freer, deeper, richer, inward life which sweetens human happiness; he perceived, with rare discernment, that the mind, thus disciplined by classical culture and ennobled by wider vistas of thought, would spread its wings and soar above the trammels of deafness, and enter upon a larger range of work and responsibility; and he felt that it was his duty as a man and a priest of national economy to act out the motto which he had years before appended to his name in the visitors' register upon the occasion of his first visit to the Ohio Deaf and Dumb Institution—"*Da Aures.*"

It is thus obvious that, possessed of a deep interest in the college, Garfield devoted his ability and influence to its welfare with a zeal which nothing could diminish. His own intelligent inspection of its scholarship begat a faith which gave force and eloquence to his appeals in its behalf. Thus inspired by a noble interest, and thus working for the college, he gained a warm and strong attachment for it; for its faculty, and, most of all, for its students, which many a time drew his footsteps hither. It is delightful to recall both his social and his official visits here. We can yet see him as he was wont to appear among us—dignified and manly in his bearing; in his keen eye beamed pride and satisfaction, as he noted the growing vigor and usefulness of the college, and in his smile a winning grace as he looked on us or took us by the hand. It is equally pleasing to recall the words of good will and encouragement with which he always was ready when called upon to speak. He had broad and liberal views of the work of the college; he disdained to speak of it as a charity; he called it "enlightened selfishness on the part of the Government" to maintain and carry it on, and in this he displayed a wisdom far in advance of many of his contemporaries.

Such was the man and friend whose memory we commemorate to-day.

O rare friend! we thank thee that thou hadst confidence in our higher education; we thank thee that thou didst make such exertions to place our *Alma Mater* on a firm foundation.

Sad it is to think that he is gone—he who was so good and great.

"Gone, but nothing can bereave him
Of the force he made his own
Being here, and we believe him
Something far advanced in state,
And that he wears a truer crown
Than any wreath that man can weave him."

Yet that he ever may be held in grateful remembrance by us, this visible presentment of his noble countenance is to-day offered to the National Deaf-Mute College. May it remain here as long as these walls shall stand, to testify our appreciation of him, to refresh our memory of his labors in our behalf, and to whisper to posterity of his love for the college. May it be the means of drawing to us other such advocates—men to believe in us, and to sympathize in our intellectual and moral efforts. And may it aid to make the general feeling toward the deaf less a feeling of commiseration and an assumption of their inferiority—more a feeling of equality as "units of humanity."

STUDENTS AND ALUMNI: We do well in thus giving a public expression of our affection and honor for Garfield; but honor, true and enduring, can come only from our inner selves. Let us emulate the tireless vigil he kept at the shrine of knowledge, which won for him the admiration and confidence of the nation; let us imitate the purity and nobility of heart which made him a blessing to the world; and let us copy the simplicity and sincerity of character which made him a king among men. Then, and then only, will we confer true honor upon his efforts in our behalf and upon our *Alma Mater* forever!

At the request of the president of the college, Col. A. F. Rockwell then read the following letter from Mrs. Garfield:

MRS. GARFIELD'S LETTER.

CLEVELAND, OHIO, *May* 5, 1883.

GENTLEMEN: With my regrets, pray accept my thanks for your invitation to me to be present at the unveiling of General Garfield's bust.

I recognize most gratefully the honor shown to his memory in this gift from the deaf-mutes to the institution at Kendall Green, and I desire to be remembered as with continued interest in the college and in friendship with its patrons.

With sentiments of high regard, I am, very truly, yours,

LUCRETIA R. GARFIELD.

To the GENTLEMEN OF THE MEMORIAL COMMITTEE, *Kendall Green.*

The bust of Garfield was then unveiled by the artist, Mr. Daniel C. French, of Concord, Mass. Its place in the hall is at the right of the platform, and it is supported on a handsomely carved mahogany bracket pedestal, made from designs kindly furnished by Mr. John G. Hill, lately Supervising Architect of the Treasury.

The following inscription is engraved upon a bronze plate which fills a panel in the bracket just below the bust:

JAMES ABRAM GARFIELD,

Advocate in Congress of the Higher Education of the Deaf.

1865–1880.

Ex-Officio Patron of this Institution, 1881.

This Memorial is a Tribute of Gratitude from the Alumni and Friends of Institutions for the Deaf in America.

At the conclusion of the Garfield memorial exercises, the president of the college announced that the Board of Directors had conferred the honorary degree of master of arts on Edward Allen Hodgson, of New York, and the same degree in course on Robert Patterson, of Ohio.

The members of the graduating class, Messrs. Smith, Reed, Fox, and Griffin, were then presented by the president of the college to the Board of Directors as candidates for the degree of bachelor of arts.

The exercises of the day were closed with the benediction by Rev. John H. Elliott, D. D., rector of Ascension Church.

At the close of the academic year in June, degrees were conferred in accordance with the recommendations of presentation day.

RECEIPTS AND EXPENDITURES.

The receipts and expenditures for the year now under review will appear from the following detailed statements:

I.—SUPPORT OF THE INSTITUTION.

RECEIPTS.

Balance from old account	$1,108 28
Received from Treasury of the United States	55,000 00
Received from sale of live-stock	234 45
Received from sale of wheat	177 50
Received from manual-labor fund	313 20
Received from board and tuition	3,921 23
Received from old material sold	19 15
Received for work done in shop	178 46
Received for damage to grounds	2 75
Received from sale of old wagon	40 00
Received from sale of grease	35 57
Received from sale of old carpets	54 90
Received from sale of old metal	26 17
Received from sale of old lumber	50 00
Found in the laundry	6 00
	61,167 66

DISBURSEMENTS.

Expended for salaries and wages out of appropriations by Congress	$21,990 85
Expended for salaries and wages out of funds belonging to the institution	6,115 20
Expended for groceries	2,588 47
Expended for meats	4,568 96
Expended for potatoes	517 50
Expended for household and incidental expenses, marketing, &c	2,410 19
Expended for butter and eggs	2,312 24
Expended for repairs	3,226 12
Expended for permanent improvements	4,284 53
Expended for furniture	825 88
Expended for books and stationery	561 41
Expended for farm tools, seeds, &c	204 87
Expended for lumber	697 34
Expended for printing	257 25
Expended for ice	220 42
Expended for medicines and chemicals	272 24
Expended for carriage and for repairs	458 00
Expended for hardware	430 28
Expended for fuel	2,336 10
Expended for blacksmithing	101 50
Expended for harness and repairs	86 35
Expended for rent of telephones	135 00
Expended for flour and feed	713 45
Expended for dry goods, shoes, clothing, &c	361 97
Expended for gas	996 66
Expended for paints, oils, &c	313 85
Expended for flowers and plants	126 50
Expended for milk	665 69
Expended for entertainment of pupils	35 00
Expended for medical and surgical attendance	493 00
Expended for illustrative apparatus	100 05
Expended for board and care of pupil at institution for feeble-minded children	300 00
Expended for bread	1,135 29
Expended for the Board of Directors	229 70
Expended for concrete roadway	8-4 56
Balance	211 24
	61,167 66

II.—Buildings and Grounds.

RECEIPTS.

Received from Treasury of the United States	$5,500 00

DISBURSEMENTS.

Expended for excavating for barn	$345 00
Expended for material and brickwork	316 04
Expended for plumbing	98 46
Expended for wages	1,308 06
Expended for lumber	1,637 36
Expended for slating	400 00
Expended for painting	70 00
Expended for carpenter's work	885 50
Expended for grading	98 48
Expended for concrete roadways	284 40
Expended for lightning-rods	56 50
	5,500 00

ESTIMATES FOR NEXT YEAR.

The following estimates for the service of the fiscal year ending June 30, 1885, have already been submitted:

For support of the institution, including salaries and incidental expenses and for books and illustrative apparatus, for general repairs, and improvements, $55,000.

For the improvement and inclosure of the grounds and repairs of buildings, $5,000.

The first estimate is the same in amount as the appropriation for the current year and also for last year.

It is expected that the number of our pupils will be larger next year than it now is, but it is hoped that, with economy, the expenses of the institution may be kept within the amount asked for.

The sum estimated for the improvement and inclosure of the grounds and repairs of buildings will be very much needed.

The construction of the intercepting sewer on Boundary street, which has been a source of great inconvenience during the past three years, will be carried completely by our front during the next two months. The condition in which the street and fence is left renders the expenditure of a considerable amount of money by the institution absolutely necessary in order to place the premises in even a decent condition. If Congress would appropriate double the amount asked for in the estimate, the money could be expended without the slightest risk of any imputation of extravagance being brought against the management of the institution.

All of which is respectfully submitted by order of the Board of Directors.

E. M. GALLAUDET,
President.

Hon. Henry M. Teller,
Secretary of the Interior.

REPORT OF THE SUPERINTENDENT OF INDIAN SCHOOLS.

WASHINGTON, D. C., *September* 25, 1883.

SIR: I have the honor to submit my second annual report relating to the schools among the Indians—the first in October last, as inspector of Indian schools, which office was changed by an act of Congress at its last session to Indian school superintendent, and the honor of the position conferred upon me, from which standpoint I submit this report:

Since my report as inspector of Indian schools was submitted I have visited most of the schools of the Indian Territory, making each school the subject of a special report, recommending such changes in employés and management as the good of the service seemed to demand. In some cases too many employés were employed. Upon my recommendations changes were made amounting to a reduction of over $3,000 per annum, while in some cases I recommended additional employés and increase of salary to others. In one instance I found a boarding-school in charge of persons wholly inexperienced in managing such an institution and without any intelligent idea of how it should be done, the agent himself not having given the matter much, if any, attention. Exception should, however, be made in this case to the conduct of the school-room during school hours; 52 children were in attendance and well managed by one teacher. The changes recommended have been made and the general management of this institution greatly improved. On some of these visits I had the company of General E. Whittlesey, secretary of the Board of Indian Commissioners, whose knowledge and counsel I found very valuable. At each of the schools we were enabled to make suggestions which in most cases were received as helps, and I believe the schools were all benefited by the inspections. I found two classes of persons engaged in the school work; one with a real heart enjoyment in it, whose whole aim seemed to be the elevation and good of the children placed under their care—a missionary spirit and desire to see good results following their labors. With them you would hear of the great possibilities and encouraging fruits of their labors, which, though arduous and continued, were more pleasant than irksome. Around them the children would gather "even as the hen gathereth her brood;" an affectionate confidence existed between the care-taker and the children, such as was calculated to make the school home more pleasant and attractive than that from which they came.

The other class were interested much more in the flight of time and quick return of pay-day, than in the progress of the children under their care. From them you would hear of the dullness and indifference to learn; of the difficulties of keeping the children in school, which could only be done by the policemen; and not much could be hoped anyway, from the dirty little creatures, who wandered away to themselves as soon as the tap of the closing bell was heard, and came back again only when they had to, and then were shy and afraid, and approached those having care of them very carefully.

It is easy to say which class is having the greatest success. Certainly the one who, prompted by the highest type of culture, stoops down to lift up the lowly, forgetful of the selfish remuneration there is in it, will accomplish more than the one who is prompted only by the monetary consideration.

The matter of pay of teachers and other employés is worthy of more consideration than has been given to it. In many cases it is too small,

so small, in fact, that it is impossible to get the best talent unless a missionary spirit prompts the acceptance of less pay than can be obtained in civilization. Persons are employed at less or no more salary than can be obtained in the States, and cut themselves off from society and comforts of home and go hundreds of miles from civilization, occupy poor quarters, with scarcely enough furniture to make them comfortable, in many cases compelled to live upon very coarse food. I think all these things ought to be taken into consideration in fixing the pay of the school employés, and the same ability should have better pay in the Indian service than in civilization.

For the current fiscal year, at the request of the honorable Commissioner, I assisted in the matter of adjusting salaries, and, while the result was not entirely satisfactory to me, I think we did arrive at a nearer adjustment of equalizing the salaries upon the present scale of prices. We were governed by the Government contract price of materials and supplies at the various agencies, giving to those at agencies where the cost of living is most the greatest salaries.

The good of the service can be promoted by a scale of salaries governed by the ability and efficiency of the employés, as well as the location. When a teacher or other employé by experience and efficiency shows a special adaptation to the work, they should be promoted to a better salary than as a beginner. The best, and those most adapted to the work, are the cheapest, even if the pay has to be more than for others.

The Indian service teaching is advanced more by good common-sense teaching than by extraordinary book knowledge. One of the most important officers of an Indian school is the industrial teacher. One-half of the time should be devoted to industrial lessons.

In addition to the schools in the Indian Territory I also visited the industrial school at Albuquerque, N. Mex. This school is under the immediate control of Prof. W. D. Bryan, who is employed by the Home Mission Board of the Presbyterian Church, with whom the Government has a contract for conducting the school, the missionary board being at all the expense of the conduct of the school, receiving a stipulated sum per capita from the Government therefor. It is a very interesting school, well managed, and doing a good work. The attendance the past year amounted to 114, mostly Pueblos, but having a few Apaches, Navajoes, and 27 Utes from the Southern Ute Agency. These Ute children are the first of their tribe who have ever gone away to school, and it is a very important step in the right direction toward the civilization of the Utes. The agent of the tribe told me when I met them in Pueblo that it was the result of frequent letters to him from the honorable Secretary of the Interior to get the Utes to send their children to school.

The citizens of Albuquerque donated a tract of 66 acres of land to the Government for school purposes. It is situated about 2½ miles from the town. To me it appeared low and flat, in fact very poor land, but was said to be as good as the land generally in that section; but it will require several years to overcome the strong alkali in the soil and make the land productive. Plans and specifications for new buildings have been made, and it is presumed will soon be under contract and the buildings completed in a few months. A school for the same tribes intended to be accommodated by the Albuquerque school could have been conducted on a much larger scale at Fort Union, but it could not be obtained.

Under instructions, I visited Fort Lyon, Colo., for the purpose of examining it with reference to its use for an Indian school. In some re-

spects found it very well adapted for that purpose, but did not regard its location as a good one for a school, from the fact of its separation from civilization and from opportunities to place the children among farmers to work during vacation, or such other time as might be thought best. The officer in command was very courteous and kind, but informed me that the post was required for military purposes and would not be given up for an Indian school.

The citizens of Lawrence, Kans., donated 280 acres of land, lying near the city, to the Government for school purposes. It is a very beautiful and valuable tract of land; the site selected for the buildings is within a half mile of the city limits and a mile and a half of the various churches. The children can have the privilege of attending the Sabbath schools and churches, and thus the people become interested in them, and the school become identified with the people as "our school." Buildings are now in process of erection for the accommodation of 300 children; 340 may be crowded into them. The contract requires their completion by January 1, 1884. I hope to see them ready for occupancy by April 1, 1884.

The present contract for these buildings is for $45,419; some additional buildings will be necessary, including that for steam-heating machinery, connected with which should be a large dining-room, laundry, and drying-room; two or four cottage buildings for employés' residences should also be built; also buildings for shops, a special estimate for which will be forwarded.

Provision was made by act of Congress of May 17, 1882, for the erection of two school buildings, one to be located in the Indian Territory, south of Kansas and adjacent to the Ponca, Pawnee, and Osage Reservations; the other on the old Pawnee Reservation, Nebraska, or on the new reservation in Dakota. With that in the Indian Territory provision was made for one section of land. In making the special location for the building on account of water privileges, I found it necessary to select 1,200 acres of land instead of 640. It is respectfully suggested that the land is the property of the Cherokee Nation, and some steps should be taken to have its ownership transferred to the United States. It may be necessary, to accomplish this, to have some action of the council of that nation, delegating to their delegates the authority to negotiate and transfer; if so, it is respectfully recommended that the attention of Governor Bushyhead be called to it. The building on said land will be ready for occupancy by the 1st of November next.

The act of Congress provided for a building for 150 Indian youths, at a cost not exceeding $15,000, or $100 per capita.

The State institutions of Kansas, as well as other States where material is cheaper and labor both cheaper and easier to obtain, cost from $400 to $800, and even $1,200, per capita. It will be seen at once that a very difficult task was required in this case, but we succeeded in contracting for a very nice stone building, with school-room, dormitory, dining-room, and kitchen privileges sufficient for 150 children, for the sum named in the bill, but an addition for laundry, drying-room, bath-house, and accommodations for employés are absolutely necessary and should be added. Stabling, corrals, and fences are also necessary. It is intended to make this an agricultural and stock industrial school, where the children may learn not only farming, but butter and cheese making; hence it is again urged that the whole amount of land selected, to wit, 1,200 acres, be provided for. A special estimate for the necessary additions is included in the regular estimate.

The old building on the Pawnee Reservation is being repaired and additions made to it for the accommodation of 150 Indian children. The work embraced in the present contract amounts to $16,300, besides the other additions and outside buildings that are necessary, including the laundry, drying room, and bath-rooms. Estimate will also be forwarded in this case. The contractor expects to complete his present contract by February next.

The large number of buildings being put up in the West this year has made it very difficult to get contractors to take hold of these jobs; and it has not been done in some instances, until several times advertised and after great personal effort. These circumstances have made the contractors more independent, and possibly their bids a little higher than they would have been if work at home had been scarce.

In addition to the instances already named, I have supervised plans and specifications for buildings at Rosebud and Devil's Lake Agencies, Dakota; Washakie, in Wyoming; Wichita and Caddo, Sac and Fox, and Absentee Shawnee, in the Indian Territory; and additions and repairs to various other school buildings at several of the agencies.

Upon entering upon my duties in connection with the schools the honorable Commissioner of Indian Affairs kindly transferred to my assistance one of the clerks of his Bureau, Mr. S. M. Yeatman, by whose very efficient assistance in preparing blanks for office use and gathering information from the agencies I am enabled to present a table showing the exact attendance and cost per capita of all the Indian schools under the control of the Government, from which it appears the average attendance is 20 per cent. more the past year than the previous one, and the average cost much below what it has usually been estimated at. I say estimated, because this is the first year the amount has been arrived at by actual figures.

The table shows how much has been paid by the Government and how much is the result of the labor of the Indian children themselves and of other agency labor. The cost of one year cannot be regarded as an exact criterion for other years, because the cost of supplies varies from year to year.

The table shows the monthly cost of each school. The average cost of all is $11.50 per month; the employés are engaged by the year; many of the schools continue during the year; hence I take the amount of $138 per capita as the cost for the past year. This amount is based on very low salaries, which should be increased a little, and the estimate should be made at $150 per capita for the boarding-schools.

The day-schools cost for the past year, including employés, books, and fuel, at the rate of $670.25 each per annum. In some of these schools two teachers are required. It is respectfully suggested that the estimate for the next fiscal year should be made at the rate of $700 per annum for each school.

The capacity of the boarding-schools for the past year was 4,400 and the day-schools 4,000, making a total of 8,400. This includes only the schools at the agencies and the one at Albuquerque, N. Mex.; adding to it the capacity of Carlisle, Forest Grove, and Hampton, 625, and the three new buildings soon to be finished, with capacity for 640 more, and the new buildings, and additions to old ones at agencies, making an increase in capacity of 1,130 additional pupils, and 10 new day-schools already provided for to accommodate 500, and a semi-industrial and boarding-school for 50 at the Cheyenne and Arapaho Agency, and we have a total capacity already provided for, of over 11,000 pupils.

The semi-boarding and industrial school referred to was recommended in my report of October last, and is repeated here with renewed recommendations for its adoption at some of the agencies where best adapted. It should consist of a four-room building, providing for home comforts for a man and wife and a teacher; also a school-room accommodating 50 children. A midday meal should be provided for the school by regular details of girls, under the direction of the matron, who should also visit the homes of the Indians living in that neighborhood and instruct the women in household duties. The man should have charge of the outside work, including farming and the care of stock, in which he should instruct the boys of the school; should also give instruction to the Indians of the neighborhood in the same branches; the teacher to have charge of the children during school hours.

It is estimated that the cost of the building, utilizing such Indian help as can be done to advantage, will not average over $2,000, and the cost of conducting the school, including the pay of three persons and necessary provision for a midday meal, will not exceed $3,500. Of course this provision at agencies where rations are issued can be taken from the regular supplies without much additional cost. This plan it is believed will take the place of additional boarding-schools at agencies where the present facilities are much too small to accommodate the school population. Twenty new buildings of this character are recommended for construction, to be divided among the Sioux, Navajo, Kiowa and Comanche, Cheyenne and Arapaho, Mexican Kickapoo, Ute, and Crow Indians.

Additional day-schools are also required at several of the agencies. In connection with this matter I present a table showing our treaty obligations to several of the tribes named above, and others not included in the above list, by which it will be seen what our failures have been. Due consideration is also given to what has been done for each tribe named. It will be seen by reference to this table that the amount which would have been required to fulfill these treaty obligations up to and including the present fiscal year would have been $3,759,400.

I may be permitted to repeat what I said in this connection in my report of October last: that it is probable if these treaties had been observed in good faith by both Government and Indians the tribes immediately interested would have been self-supporting, and far enough advanced to be classed with the civilized tribes. But circumstances have changed, and the provisions then made to build a school-house and furnish a teacher for each 30 children may not now be the best plan to reach the end desired, but much can be done by an appropriation sufficient to guarantee to them school privileges for those of school age.

The agency schools are not less important to the civilization of the tribes than the more important schools located away from the agencies. While too much cannot be said in praise of the work being done at Carlisle, Hampton, and Forest Grove, if either had to be abandoned I would expect the civilization of the tribes sooner from the influence of well-conducted agency schools than from those removed from the agency The influence of the agency schools is felt by all the Indians of the agency, and exerts a good influence over the old as well as the young, but neither should be abandoned, but both increased in number and capacity. An additional industrial school should be built for the Sioux at some point adjacent to their territory, in Iowa or Dakota, where they may be brought more in contact with civilizing influences.

Twenty thousand dollars are estimated for to purchase a farm for the industrial training of the children at Carlisle; this should be done, as

it is very much needed, and will greatly promote the interests of that important institution.

Twenty-five thousand dollars are also asked for the erection of buildings at Forest Grove, Oreg., for the Indian school at that place. This is a very important matter, as that school has proven to be a very successful institution, willingly and liberally patronized by the Indians of the Pacific coast. The Government does not own either land or buildings, and is liable to be called upon at any time to abandon their present location, or be taxed an exorbitant rent. The school is increasing in importance all the time. The superintendent informs me that he could now have 300 children in the school if he had the room for them; that is the only institution of that kind for 30,000 Pacific coast Indians, who do not cost the Government but a very small amount compared to those this side of the mountains. I sincerely hope this appropriation may be made.

There has been some difficulty in finding industrial schools, such as are contemplated in the appropriation for the current fiscal year, for placing children in the different States, but applications have been made and approved for nearly four hundred children, and an increasing interest manifested from various States; so it is believed the number may be very materially increased in the next fiscal year.

As a whole the educational work of the past year among the Indians has been very encouraging, both in an increase in numbers attending and an increase of the interest of the adults for their children. Their attachment for their children is as strong as that of white people, and the pain of parting with them to go away is as severe, and yet they are yielding to it more willingly, believing it to be for the best interest of the children. The knowledge of education with them begins to mean something, and in this connection I would respectfully recommend that it would be a stimulating inducement to them if some wise provision were incorporated in the bills for the admission into the sisterhood of States of Dakota and New Mexico for Indian citizenship, based upon knowledge of civilized ways or qualifications.

The cost of conducting Indian educational institutions is very much below that of white schools. I have taken pains to ascertain the cost of many of the leading boarding-schools among the white people, and do not learn of any costing less than $200 per capita, and that not including books, clothing, or transportation—only board, washing, ironing, and mending, and teaching—while Indian schools are conducted for a less amount per capita, including everything.

Civilization is so rapidly closing around the Indian that he must soon become a part of the body politic, must receive the white man's civilization and take part in the affairs of the Government. The people of the West, where his home must continue to be, are especially interested in this matter, and the thinking, intelligent portion are anxious to see him properly prepared for it, and the thinking class is becoming the largest. An eminent gentleman in a recent paper says that 25 per cent. of the circulation of the North American Review is west of the Mississippi, and even a larger portion of some of the other important magazines. But argument is unnecessary to show the importance of liberal appropriations or instances to prove the possibilities of Indian education. So many demonstrations have come before the country of the good results of well-directed efforts in that line that the great mass of people will uphold with their approbation the action of Congress in liberal provision for the education of all classes of the ignorant, not excepting the Indians.

I would respectfully call attention to the importance of some educational provision for the Seminoles of Florida; also for the Moquis. Both tribes are without an existence so far as the records go, and yet do actually exist, and unless by special provision of the Government will continue in ignorance and superstition.

I have the honor to be, very respectfully, your obedient servant,

J. M. HAWORTH,
Superintendent of Indian Schools.

Hon. H. M. TELLER,
Secretary of the Interior, Washington, D. C.

REPORT OF THE SUPERINTENDENT OF THE YELLOWSTONE NATIONAL PARK.

HEADQUARTERS YELLOWSTONE NATIONAL PARK,
Mammoth Hot Springs, September 10, 1883.

SIR: In compliance with the requirements of your office I have the honor to submit the following report pertaining to the Yellowstone National Park for the fiscal year ending June 30, 1883. A detailed statement of last summer's business, after the first of July and up to the close of business on the last of October, will be found in my annual report of last year, now in your office, and to which I respectfully refer you for particulars. All kinds of labor and improvements are necessarily suspended in the Park on or about the 1st of November on account of snow and the inclemency of the weather, at which time I settled with and dismissed all employés, except assistant and two men, whom I left in charge of the Government stock and property for the winter. Not deeming it necessary to remain here during the winter I returned to my home in Iowa, thence proceeded to Washington to counsel with you in regard to park management, and to prepare my annual report, which, owing to the press of business, I was unable to furnish at an earlier date. When my business was accomplished which called me to the capital, in compliance with your orders I returned to my post, where I arrived on the 1st of March, 1883, you deeming my presence in the Park necessary that early in the season by reason of reports reaching you of the slaughter of game within the Park. Upon investigating these rumors I ascertained that a few elk and deer had been killed by parties contracting to furnish meat for the hotel company. They were notified that hunting in the Park would not be allowed, and they immediately desisted. Hunting here has been practically suspended ever since, except what may be done by stealth. Indeed, I am glad I can assure you that the reports which reached you last winter relative to the slaughter of game in the Park were greatly exaggerated. On March 1 it was yet winter in this vicinity; and there was little we could do until the latter part of the month, when the weather became mild, and we were able to build a blacksmith shop 16 by 20, with attachment 10 by 16, used as cow house, a storehouse 16 by 37, a carpenter shop 16 by 20. The lumber was kindly furnished us by the hotel company, which had saw-mills running here. With refuse lumber and slabs (which cost us nothing but the hauling) we constructed a large corral, a wagon shed, and harness house; all of these buildings were absolutely requisite—indeed, they were indispensable for the proper care of our supplies and tools. I consider it fortunate for the interests of the Government here

that the hotel company consented to let us have the lumber, as we have no mills anywhere near here, consequently lumber could not be delivered in the Park without costing three times as much as the hotel company charged us for the lumber we used. In justice to this company, it is my duty to inform you that they only charged $20 per M at their mills. It cost the company that amount per M to get the logs to their mill and manufacture the same. The aforementioned buildings are covered with boards and battened. The roofs are not rain proof, and should be covered with shingles to be tight. This mountain lumber is full of knots, which crack open upon exposure to the sun; consequently, it is impossible to make compact roofs with any boards that can be obtained here. During the construction of these buildings I was also making the necessary preparations to commence the work on the roads. As soon as the snow cleared away and the roads became passable I went to Livingston, Bozeman, and Virginia City, Mont., and purchased one span of mules, harness, and wagon; also, one span of horses, harness, and wagon—the latter for the use of Superintendent—also purchased the necessary supplies and tools to carry on the season's campaign of road-making and bridge-building in the Park. We commenced active operations on the roads in the neighborhood of Mammoth Hot Springs the latter part of May. It was near the middle of June before we could get supplies and men into the Park from Virginia city to the Fire Hole Basin. My object was only to employ sufficient force to consume the unexpended balance of the appropriation applicable to the fiscal year ending June 30, 1883, at which time I understood a new law would take effect, and the expenditures for the construction of roads and bridges in the National Park would thereafter be under the supervision of the War Department. I kept two parties of men at work on the roads, each party about 12 strong, in different parts of the Park, repairing those places which required immediate attention.

At the end of the fiscal year I found, according to my accounts, that I had expended all of the appropriation except $191.50, which amount still remains in my possession.

My accounts for the fourth quarter of the fiscal year ending June 30, 1883, await the examination and verification of the Treasury Department.

So urgent was the necessity for the improvement of the roads in the Park, and as tourists had already began to arrive in large numbers, and as I daily expected the arrival of the engineer officer who was to relieve me of the charge of the construction of roads and bridges in the National Park, I still retained my men at work on the roads after the 1st of July. On the 20th of July, 1883, I addressed a letter to you, stating the embarrassment under which I was laboring by reason of the non-arrival of this officer whom I expected to relieve me; and not until the 27th of July did I receive your letter, under date of July 14, informing me of the assignment of an engineer officer to duty here, and advising me of the construction to be placed on the law passed last winter, making the appropriation for the protection, preservation, and improvement of the Yellowstone National Park.

I believe that I have given you a general idea of our operations for the fiscal year ending June 30, 1883, and I will now proceed to mention some matters that pertain more especially to the future management of the Park.

ASSISTANT SUPERINTENDENTS.

The law passed by the last Congress making the appropriation for the Park and creating the ten new officers, called "assistant superin-

tendents," seems to me not to have been well considered, as no provision was made for them except a meager salary, which is inadequate, if these men are required to build their own quarters, furnish their own horses, equipments, and sustenance. To be effective these officers necessarily ought to be stationed at different points throughout the Park, and to be well mounted, suitably uniformed and equipped. With the present force of ten men, I would recommend that they be stationed by twos at five of the most important points in the Park. This disposition of the force will require the erection of five comfortable cabins, as the law requires a permanent residence, and men cannot exist in this mountain country in the winter season without comfortable quarters. At this date, September 12, it will hardly be practicable to construct these buildings this season. Snow and severe weather are expected very soon. As to the operation of the law dividing the responsibility for the protection and improvement of the Park between two Departments of the Government, I am compelled to say that I think the measure unwise.

I need not enter into details in regard to this question, but I think there can be but little doubt that Congress at its next session will choose to have one responsible head for the transaction of business here as elsewhere. It must not be understood that I reflect upon the officer who has been assigned by the Secretary of War for duty here. Lieut. D. C. Kingman is all that I could desire as an officer and gentleman.

By the operation of this law the Superintendent of the Park is left without a dollar for any incidental expenses whatever for the care of these headquarters, no provision for the Government horses and mules, repairs of the buildings and fences, and many other things which I need not enumerate, but which will suggest themselves to the mind of any person familiar with the custody and care of an establishment of this kind. I cannot believe it was the intention of the makers of this law that the Superintendent should be left without the means to protect and preserve the property of the Government intrusted to his care and keeping.

HEADQUARTERS.

The headquarters building or Superintendent's residence is located, in my judgment, injudiciously. It is situated on the pinnacle of a very high and precipitous mound or hill, exposed to the fierce winds that prevail here, especially in the winter. Besides, it is nearly a half mile from water, necessitating the constant employment of a man and team to supply wood, water, and other necessaries. My predecessor (Colonel Norris) built the house here a number of years ago. He gave as his reason for locating the headquarters on the hill, that he thought it the best defensive point against Indians. There may have been, and doubtless was at that time, a necessity for such precaution; but that day and necessity have passed. The Indians in this vicinity are no longer to be feared, and, allow me to remark, that I believe the whole Indian question solved and forever disposed of just so far as railroads penetrate our country. Hence other and more economic reasons should govern in selecting a site on which to erect suitable buildings for the use of the Government in this great National Park. The house now occupied is nothing but a log cabin at the best, sadly out of repair, roof leaky, and the force of the winds shakes the plaster out of the cracks between the logs constantly, rendering the house hardly habitable, especially during the cold season. Heretofore these rude cabins were all that were re-

quired, but all is now changed here. We have railroads, the telegraph, and great hotels, with all the crowd, business, and fashion that these wonderful civilizing agencies imply. I respectfully request that this subject be brought before Congress. In my next estimate, which I shall forward soon, I have named an amount which I deem necessary for this object.

HOTEL COMPANY.

Messrs. Rufus Hatch & Co. have erected at the Mammoth Hot Springs, in the vicinity of the headquarters, a large and elegant hotel for the accommodation of tourists. The hotel is very commodious and designed to be first class in every particular. The season for travel here was well advanced before the house was near enough completion for the accommodation of guests. It is not yet finished, and workman mingle with visitors through its great halls; the sound of gong that calls one to dinner is deadened by the clatter of the carpenter's hammers upon the walls. There is much dissatisfaction and resentment manifest amongst the people of the Territories, especially amongst those living in the Yellowstone Valley, in the vicinity of the Park, against and with the claims that the "Yellowstone National Park Improvement Company" asserts, to wit, that this company holds the exclusive right and privilege to do all business of whatever kind or character (aside from that which is done by the Government) within the limits of the Park. I have had numerous inquiries to know if this is true, and I have invariably replied that if such was the case I had not been so informed by the Interior Department. The Northern Pacific Railroad Company have constructed a branch railroad from Livingston, Mont. (on their main line), up through the valley of the Yellowstone River to within 8 miles of the Mammoth Hot Springs, from which point Wakefield and Hoffman's excellent stages connect with every train to and from the hotel. This hotel company will doubtless be prepared by next season to furnish first-class accommodation to all who may come at most of the important points in the Park.

LAWS PERTAINING TO THE GOVERNMENT AND PROTECTION OF THE PEOPLE OF THE PARK.

The time has arrived when an imperative necessity demands the attention of Congress to this subject. The people here at this time have no security against any depredation or lawless act against either person or property. And no one understands better than does the vicious and criminal classes our defenseless condition.

The consequences are that this Park is overrun (especially in the summer) with large numbers of men of very doubtful character—a menace not only to the officers and employés of the Park, but also to the life and property of every visitor. It is not my province to recommend the form of government required here, but my duty to call your attention to this important subject, and I trust you will submit to Congress some plan of action to guide and protect us, best suited in your judgment to accomplish the desired end. It has not been the fault of the Secretary of the Interior that good and sufficient rules for the government of the Park have not been made. Nor is it the fault of the Superintendent that the same have not been duly published and promulgated, for all of this has been done. But the trouble is and has been that the Superintendent has not been provided with the necessary

machinery nor physical force to compel the obedience to the rules
egulations issued by the Secretary of the Interior for the govern-
of the Park. Cheyenne, Wyo., the seat of government of this
tory, is nearly 1,000 miles from here, and, so far as I am ad-
, the nearest point to which we can appeal to the civil law for
ction. Several men have been shot in the Park this season, and
nstantly killed. I notified the Interior office of one shooting that
red last March near the headquarters. I also gave notice of the
ission of the crime to the governor of Wyoming, who replied that
ad placed my communication in the hands of the United States
ct attorney, and requested me to furnush the names of the wit-
s, which I promptly did. But in the mean time the culprit escaped,
so far as I know, has not been apprehended or heard of since.

TOURISTS.

sitors to the Park this season have been largely in excess of the
er of last year, and a very wide distinction in the locality from
ce they came. Heretofore the principal number of those visiting
ark came from the Territories and adjacent States, except those
foreign countries, many of whom were scientists, and who had
attracted here long before the savans of our own country had
ght it worth their while to inspect the marvelous wonders to be
l in the Yellowstone National Park and nowhere else on the globe.
hat day of indifference has passed; the Eastern people have heard
e grandeur of the National Park, and the Eastern States have con-
ted their quota of their most learned and eminent citizens to swell
reat multitude that have thronged these mountains the past sum-
who have been invigorated by inhaling the pure air, healed by
ing the wonderful waters, and to be inspired to great thoughts
noble deeds by the beautiful and sublime scenery that here sur-
ls you on every hand. This season an unprecedented number of
distinguished personages have visited the Park—both of our own
try and from foreign climes—the most eminent of whom was the
dent of the United States, accompanied by a member of his cabinet,
Robert Lincoln, Secretary of War, and escorted by the Lieutenant-
ral of the Army, with his staff officers, and a company of cavalry.
nad the distinguished honor and the pleasure, as the representative
e Government here, to welcome the President with his eminent
ls and companions to this Park, and to assist them in pitching
camp within the inclosure, immediately in front of these head-
ters.

fore the arrival of the Presidential party, came a party hardly less
nguished, viz: The General of the Army, with staff officers and
t of cavalry, accompanied by the Chief Justice of the United States
Associate Justice Gray, of the Supreme bench; also, Vermont's
ent and distinguished Senator, Mr. Edmunds. Close following this
came another of equal importance, led by three United States
tors, from three different and important States in the Union, to wit:
tor Dawes of Massachusetts, Senator Logan of Illinois, and Sen-
Cameron of Wisconsin. Next, the great States of Kentucky and
ouri were represented by their distinguished and chosen sons, Sen-
Beck of Kentucky, and Senator Vest of Missouri. Besides these
ent personages, who are now directly connected with the Govern-
, many others visited this "wonderland," whose names are as
iar as household words with the people of our country, both for

their distinguished ability and no less distinguished public service, a few of whom I will name: Hon. Roscoe Conkling, New York; Hon. George S. Boutwell, Massachusetts; Hon. Edwards Pierrepont, New York; Hon. George C. Gorham, Washington, D. C.; Governor Crosby, of Montana; Hon. Morton E. Post, Wyoming.

* * * * * * *

All of which is respectfully submitted.

I have the honor to be, very respectfully, your obedient servant,

P. H. CONGER,
Superintendent Yellowstone National Park.

Hon. H. M. TELLER,
Secretary of the Interior.

REPORT OF COMMISSION TO PROVIDE FIRE-ESCAPES FOR PUBLIC BUILDINGS.

WASHINGTON, D. C., *October* 5, 1883.

SIR: The undersigned, under the act of Congress approved August 7, 1882, directing the erection of suitable fire-escapes, and stand-pipes and other facilities for extinguishing fire in the Government Printing Office and Hospital for the Insane, have the honor to submit the following report upon the work committed to their charge:

On the outside of the outer walls of the Public Printing Office building there have been erected four stand-pipes with outlets for water at each story. In connection with each stand-pipe is an exterior iron ladder with balcony at each story for the convenience and safety of firemen. These are similar to those erected at the Government Hospital for the Insane, which are herein more fully described.

Three capacious iron stairways upon the outside of the building with easy communication with each story and leading to the court-yard have also been constructed. Along the H and North Capitol street fronts and around the ends of the old portion of the building a seven-inch rolled iron beam has been fixed at the upper story windows, having on it two trolleys with wire baskets and suitable hoisting tackle attached, so arranged that access can be had to each window of these fronts for the purpose of saving any who might be prevented reaching the iron fire-escapes in the rear.

A large steam pump has has been procured and put in place and connected with the stand-pipes, solid wooden sliding doors, sheathed with tin upon both sides, have been placed at the end of the North Capitol street corridor where it enters the main building, and all the exterior doorways have been hung to open outwardly.

Your commission cannot let this occasion pass without bringing to the notice of Congress the insecure condition of the old portion of this building. Its floors are of ordinary wooden construction, and are in places saturated with oil, and it is the opinion of the undersigned that these floors ought to be reconstructed of iron beams and brick arches like the floors of the newer portions of this building.

As a further protection against loss by fire, they would recommend the construction of fire-proof stairways in the interior, and the inclosing of all the interior stairways and elevator-shafts within brick walls.

As relates to the work done under their direction at the Government

Hospital for the Insane, Dr. W. W. Godding, superintendent of that establishment, reports as follows:

One iron stairway and five fire-escapes with stand-pipes have been placed upon the outside of the buildings. The iron stairway is 3 feet 8 inches in width, with hand-rail. It has two platform landings and twenty-one steps, and affords an easy and safe means of outside egress from the dormitory of "Atkins Hall" in the second story. The fire-escapes consist in each case of an iron ladder secured to the wall, with iron platforms bracketed from the wall at the level of each window-sill. These platforms have iron hand-rails, and are made fast by bolts carried through the wall with nut and plate on the inside. Alongside of this a 3-inch stand-pipe, also attached to the wall, is carried up together with the ladder to the top of the battlements of the roof. This stand-pipe is attached to the hydrant system of the hospital, which connects with the fire-pump. There is also a valve to close off the same, together with a Y branch looking down near the ground, having a nipple to provide a fire-engine attachment. The stand-pipe has also Y branches at the level of the windows of each story. These branches have a thread cut for hose attachment with screw-cap and swivel-chain fastening for security when not in use. Two of the escapes on the main building are for four stories, one for three, and one for two, but they all have platforms at each story, and in all cases the ladder extends to the roof and the stand-pipe has a hose-connection at that point.

The fire-escape at "The Relief" is carried with the stand-pipe to the ridge of the roof of the center building, and has five platforms, one at the level of each story, and the attic.

In adddition to the above protection, your commission authorized and defrayed the expense of making fire doors and frames to place in the fire-walls dividing the sections of the building and to cut off the stairways from the wards. These doors are of double thickness of matched white pine, the one perpendicular, the other horizontal, and securely nailed together. The doors as well as frames are covered with tin with turned lap and afterwards soldered. These, forty-nine in number, have been carefully made and placed by our own workmen, and we believe will afford as good a barrier against fire as can be made where an opening in the walls is required.

As you are aware, the hospital has during the past year, outside of this appropriation, built fire-walls dividing the main building into sections; also carried the interior stand-pipe through the roof, providing hose for use at that point. This, in addition to the provision made in former years for protection from fire, together with the contemplated changes to be made during the present year in walls and stairways, will make the hospital as secure from a general conflagration as any building not made fire-proof in its construction.

In view of the special difficulties in the way of removing the class of persons here provided for in case of fire, and the possible great loss of life that might therefore ensue in the event of such calamity, it would seem desirable to make all the main thoroughfares of the building as fire-proof as possible, and in renewing the corridor floors, as will from time to time be necessary, to introduce the iron beams and brick arches for these floors which are being used in the additions now building. The insane will readily take their usual routes of egress, but could hardly be made to take a fire-escape ladder; hence the greater the necessity for making the passage fire-proof. An appropriation of $5,000 for commencing these changes during the coming year has been asked in the estimate for the support of the hospital for 1885.

The undersigned earnestly recommend an appropriation for further security against loss by fire at the Government Asylum for the Insane, as above suggested by the superintendent.

* * * * * * *

Very respectfully,

JAMES G. HILL,
Architect of the Treasury.
EDWARD CLARK,
Architect of the Capitol.
M. C. MEIGS,
Late Quartermaster-General, U. S. A.,
Brevet Major-General (retired).

Hon. H. M. TELLER,
Secretary of the Interior.

REPORT

OF

THE POSTMASTER-GENERAL.

POST-OFFICE DEPARTMENT,
OFFICE OF THE POSTMASTER-GENERAL,
Washington, D. C., November 19, 1883.

SIR: Before proceeding to state the operations of the Department for the past year, I avail myself of the occasion to pay deserved tribute to the character and worth of my predecessor in this office, the late Hon. Timothy O. Howe, who died on the 25th of last March, after a long and useful public career.

FINANCIAL STATEMENT.

The revenues of the Department for the fiscal year ended June 30, 1883, amounted to $45,508,692.61, as follows:

Ordinary postal revenue	$45,097,073 24	
Net revenue from money-order business	411,619 37	
		$45,508,692 61
The expenditures on account of the service of the year, not including amount credited to Pacific railroad companies		42,816,700 56
Balance available for outstanding liabilities		2,691,992 05
Deduct estimated amount of outstanding liabilities for the year		775,000 00
Estimated balance after discharge of outstanding liabilities		1,916,992 05
Deduct amount credited to the Pacific Railroad Companies for mail transportation for the year		915,710 22
Estimated surplus of revenue over estimated total cost of the service for the year		1,001,281 83

In addition to the expenditures for the service of the year, $466,243.87 was paid on account of liabilities for previous years, making the total amount disbursed during the year, not including credits to Pacific Railroads, $43,282,944.43.

The receipts for the year were $3,632,282.46, or 8.6 per cent., more than those of the previous fiscal year. This ratio of increase is about 3 per cent. less than the average one for the preceding three years, and it may be accounted for in large part, if not wholly, by the fact that the public were induced to limit their purchases of three-cent postage stamps and stamped envelopes in anticipation of the change of letter postage

to two cents, fixed to take effect on the 1st of October last. Following this report will be found an interesting table, marked I, showing the sources from which the revenues of the Department for the last fiscal year were derived, also the gross revenue by States and Territories and the percentage of such revenue by States and Territories.

The expenditures are itemized in Table No. 3 accompanying the report of the Third Assistant Postmaster-General. The increase in the item of compensation to postmasters was $1,350,717.74, or a little more than 15 per cent., over the expenditure for the previous year. This was an unusually large increase; but it is estimated that nearly $700,000 of it was due to the fact that the act of March 3, 1883, to equalize the salaries of postmasters, was made to apply to the fourth-class offices from the date of its passage, instead of from October 1, when the reduction of postage took effect. The expenditure was $1,515,394.46 in excess of the appropriation. The deficiency was unavoidable, since the law fixes the compensation of postmasters, and authorizes them to retain it in accounting for the proceeds of their offices. The increase in the expenditure for clerks in post-offices was $458,682.81, or about 12 per cent., over that of the previous year; and for letter-carriers it was $550,043.77, or 20 per cent.

The expenditures and liabilities for railroad transportation for the service of the year may be stated as follows:

Amount already paid (being $179.74 in excess of the appropriation)..	$11,155,179 74
Amount reported for payment and suspended on account of the insufficiency of the appropriation	423,992 92
Estimated amount for service not yet reported for payment	225,000 00
Estimated total expenditures and liabilities for railroad transportation for 1883	11,804,172 66
Add amount credited to Pacific railroad companies	915,710 22
Estimated total cost of railroad transportation for 1883	12,719,882 88

I have included in the foregoing the amount earned by the Pacific railroad companies and credited to them on the books of the Treasury Department for the service of the last year.

The act of March 3, 1879, under which the Pacific railroad companies are credited for carrying the mails, was formerly held to apply to their branch and leased lines, but recent decisions of the courts require payment for service on these lines to be made out of the appropriation for the transportation of the mails. The amount already ascertained for service on these lines for the last year is $452,567.23, and it is estimated that this will be increased to $500,000, which amount is included in the exhibits already made of expenditures and liabilities for the year.

As compared with the previous year, there was a decrease in the expenditure for star service of $1,042,930.58, or 18 per cent.

The aggregate appropriations for the service of the year were $44,876,000.18, or $1,284,899.62 more than the total expenditures and

estimated liabilities for the same, exclusive of the amounts credited to the Pacific railroad companies.

The appropriations by items will be found in Table No. 3 attached to the report of the Third Assistant Postmaster-General.

APPROPRIATIONS TO SUPPLY DEFICIENCIES IN THE POSTAL REVENUE.

Congress appropriated $1,902,177.90 to supply estimated deficiencies in the postal revenue for the year ended June 30, 1883, and $2,152,258 was appropriated for a like purpose for the year ended June 30, 1882. These appropriations remain undrawn in the Treasury, the postal revenues having been found more than sufficient to meet the expenditures of both years. Further information touching the financial operations of the Department will be found in the report of the Third Assistant Postmaster-General and the Auditor, in the appendix hereto.

ESTIMATES FOR 1885.

The receipts and expenditures for the fiscal year ending June 30, 1885, are estimated as follows:

Ordinary postal revenue	$46,674,078 31	
Net money-order receipts	430,000 00	
		47,104,078 31
Expenditures exclusive of amounts to be credited to Pacific railroad companies		50,062,189 60
Deficiency to be supplied out of the general Treasury		2,958,111 29

ESTIMATED REVENUE.

Unusual difficulty is experienced at this time in forecasting the postal revenues by reason of the recent reduction of postage. The Department has no statistics showing the amount of postage collected on each of the several classes of mail matter, and no means, therefore, of determining the precise extent to which the revenues are affected by that reduction. Another element of uncertainty is the extent to which the mails will be increased under the stimulus of a lower rate of postage. Some compensation for the loss in the rate may reasonably be expected from three sources, viz: First, an increased amount of correspondence; second, the increased revenue to be derived from the substitution of sealed circulars at two cents for open ones at one cent; and third, the increased revenue from the substitution of letters for postal cards.

The increase of revenue from these sources is, however, purely conjectural. In the absence of more certain data, the revenue for the next year has been estimated at $47,104,078.31, upon the following calculations:

The increase in the postal receipts for 1880 over 1879, following the re-

vival of the business industries of the country, was at the rate of 10.8 per cent.; for 1881 over 1880 it was 10.4 per cent.; and for 1882 over 1881 it was 13.8 per cent.. The increase for 1883 over 1882 was only 8.6 per cent.; but, as has already been explained, the receipts of the last year were materially affected by the then approaching reduction of letter postage. Except for this reduction of postage the increase of receipts would probably have been not less than 10 per cent., the quarter ending September 30, 1882, before the reduction was agitated, showing an increase of 11 per cent. over the corresponding quarter of the preceding fiscal year. Computed at an annual increase of 10 per cent., the ordinary postal receipts (excluding money-order receipts) *on the basis of a 3-cent letter rate of postage* would have been $54,567,458.61 for the fiscal year ending June 30, 1885, as shown in the following:

Ordinary postal revenue for the year ended June 30, 1883	$45,097,073 24
Add increase of 10 per cent	4,509,707 32
Gives estimated revenue on basis of 3-cent letter rate for the year ending June 30, 1884	49,606,780 56
Add increase of 10 per cent	4,960,678 05
Gives estimated revenue on basis of 3-cent letter rate for the year ending June 30, 1885	54,567,458 61

Taking the issues of 3-cent stamps and stamped envelopes as the measure of the values affected by the reduction of postage, and making no allowance for compensations to follow the lessening of the rate, the loss of revenue by the difference in the rates may be estimated at $10,393,380.30, as appears in the following:

Value of 3-cent stamps and stamped envelopes issued during the year ended June 30, 1883	$25,768,711 50
Add 10 per cent. increase	2,576,871 15
Gives estimated value for the year ending June 30, 1884	28,345,582 65
Add 10 per cent. increase	2,834,558 26
Gives estimated value for the year ending June 30, 1885	31,180,140 91
Deduct one-third for reduction of letter rate from 3 cents to 2 cents.	10,393,380 30
Leaves estimated revenue from letters (not including drop or foreign letters)	20,786,760 61

It will be observed that this estimate of issues assumes an annual increase of 10 per cent., the ratio at which the gross receipts are increased in the previous estimate. It will also be seen that in placing the revenue from letters (excluding drop and foreign letters) at $20,786,760.61, no allowance is made for an unusual increase in the volume of business to follow from a reduction of the rate of postage. That some allowance should be made will be readily conceded. Just

what amount should be allowed cannot, of course, be determined with any degree of precision at this time. It has, however, been roughly placed at $2,500,000.

The allowance of this sum for extra business would leave the estimated net loss on letters for the next year at $7,893,380.30, or a little less than one-fourth of the estimated revenue from letters upon the 3-cent basis.

The foregoing estimates may be restated as follows:

Estimated ordinary postal revenue for the year ending June 30, 1885, on basis of 3-cent letter rate	$54,567,458 61	
Deduct estimated loss occasioned by reduction of letter rate to 2 cents	7,893,380 30	
		46,674,078 31
Add net profits from money-order business for the year ending June 30, 1885, as estimated by superintendent of the money-order system		430,000 00
Gives total estimated revenue for the year ending June 30, 1885, on basis of 2-cent letter rate		47,104,078 31

ESTIMATED EXPENDITURES.

As shown above, the expenditures for the year ending June 30, 1885, are estimated at $50,062,189.60, not including amounts credited to the Pacific railroad companies. They are explained so fully in detail in the papers attached to the table of estimates in the appendix and in the various Bureau reports that they need not be further referred to here.

POST-OFFICES ESTABLISHED AND DISCONTINUED.

The report of the First Assistant Postmaster-General presents the following comparative statement of the number of post-offices established and discontinued and of postmasters appointed for the fiscal years ended June 30, 1882, and June 30, 1883:

	June 30, 1882.	June 30, 1883.	Increase.	Decrease.
Number of offices established during the year	3,166	3,253	87	.....
Number discontinued	1,447	1,621	174	.....
Decrease (comparison of net increase for the years)	1,719	1,632	.....	87
Whole number of post-offices	46,231	47,863	1,632	.....
Number filled by appointment of the President	1,951	2,143	192	.....
Number filled by appointment of the Postmaster-General	44,280	45,720	1,440	.....
Appointments were made during the years—				
In resignations and commissions expired	7,346	7,734	388	.....
In removals and suspensions	1,021	705	.....	316
In change of names and sites	349	342	.....	7
In deaths of postmasters	461	468	7	.....
In establishment of new post-offices	3,166	3,253	87	.....
Total	12,343	12,502	159	.....
Total number of cases acted on during the year	14,340	14,882	542	.....

EMPLOYÉS IN THE POSTAL SERVICE.

The following table shows the number of employés in the Post-Office Department; also the number of postmasters, contractors, clerks in post-offices, railway post-office clerks, and other officers in the service, June 30, 1882, and June 30, 1883:

Officers and employés.	June 30, 1882.	June 30, 1883.
DEPARTMENTAL OFFICERS AND EMPLOYÉS.		
Postmaster-General	1	1
Assistant Postmasters-General	3	3
Superintendent of money order system	1	1
Superintendent of foreign mails	1	1
Superintendent of railway adjustment	1	1
Chief clerk of the Postmaster-General	1	1
Chiefs of divisions	4	4
Topographer for Post-Office Department	1	1
Disbursing officer and superintendent of building	1	1
Law clerk	1	1
Stenographer	1	1
Appointment clerk	1	1
Superintendent of blank agency*	1	1
Chief clerks of Bureaus	5	6
Clerks, messengers, watchmen, &c.	498	534
Total	521	558
POSTMASTERS AND OTHER OFFICERS AND AGENTS.		
Postmasters	46,231	47,863
Contractors	5,156	4,944
Clerks in post-offices	7,100	8,040
Letter-carriers	3,115	3,680
Railway post-office clerks	3,570	3,855
Post-office inspectors and railway mail service superintendents	84	90
Total	65,777	69,020

*Now designated superintendent of division of post-office supplies.

THE FREE-DELIVERY SYSTEM.

This system was in operation during the year at 154 offices (including 42 newly established ones), and employed in the aggregate 3,680 carriers.

The total appropriation for this service was $3,200,000, including a special appropriation of $200,000 to carry out the provisions of the act of August 2, 1882, an increase of $575,000 over that of the preceding year. The total cost of the service was $3,173,336.51, leaving an unexpended balance of $26,663.49. The increase of cost over the preceding year was $550,073.77. This was owing to the extension of the service to 42 additional cities in different sections of the country, employing in the aggregate 222 carriers to the appointment of 343 additional carriers in the older free-delivery cities, to the increased pay of auxiliary carriers from $400 to $600, and to the promotion of carriers from the lower to the next higher grade at the expiration of one year's service, as required by the act of August 2, 1882.

POSTAGE ON LOCAL MATTER.

The postage on local matter at the various offices amounted to $4,195,230.52, an increase over the preceding year of $378,654.43, and

over the total cost of the service of $1,021,894.01. This increase in postage on local matter was 9.92 per cent., while the increase in the cost of the service was 20.96 per cent., mainly attributable to the requirements of the act of August 2, 1882. The average cost per piece for handling matter was 2.4 mills, an increase of one-tenth mill as compared with last year. The average cost per carrier, including incidental expenses, was $859.95, an increase of $24.20 over the preceding year.

The number of mail letters delivered during the fiscal year was 342,013,750, an increase of 14.66 per cent. over the preceding year; mail postal cards delivered, 86,133,228, an increase of 20.49 per cent.; local letters, 104,437,146, an increase of 16.03 per cent.; local postal cards, 60,472,193, an increase of 18.75 per cent.; registered letters delivered, 2,830,203, an increase of 10.86 per cent.; newspapers delivered, 203,568,005, an increase of 26.60 per cent.

The number of letters collected was 345,317,803, an increase over last year of 4.90 per cent.; postal cards collected, 115,113,531, an increase of 15.78 per cent.; newspapers collected, 64,751,842, an increase of 4.90 per cent. The whole number of pieces handled during the year was 1,324,637,701, an increase over last year of 15.83 per cent., and the average number handled by each carrier was 359,955, a decrease of 1.99 per cent.

REVIEW OF THE SERVICE.

The free-delivery service was inaugurated July 1, 1863. A summary of its business during the period which has since elapsed may therefore not be inappropriate, though in its earlier years its statistics were not as complete as they are at present.

Statement of the free-delivery service since organization.

Year.	No. of officers.	No. of carriers.	Cost of service.	Postage on local matter.	Excess of cost.	Excess of postage on local matter.
1863-'64	66	685	$317,061 22			
1864-'65	45	757	448,064 51			
1865-'66	46	863	589,236 41			
1866-'67	47	943	699,934 34			
1867-'68	48	1,198	995,034 59			
1868-'69	48	1,246	1,183,915 31			
1869-'70	51	1,362	1,230,079 85	$681,864 70	$548,215 15	
1870-'71	52	1,419	1,353,923 23	758,120 78	595,802 45	
1871-'72	52	1,443	1,385,965 76	907,351 93	478,613 83	
1872-'73	52	1,499	1,422,495 48	1,112,251 21	310,244 27	
1873-'74	87	2,049	1,802,696 41	1,611,481 66	191,214 75	
1874-'75	87	2,195	1,880,041 99	1,947,559 54		$67,517 55
1875-'76	87	2,269	1,981,186 51	2,065,561 73		84,375 22
1876-'77	87	2,265	1,893,619 85	2,254,597 83		360,977 98
1877-'78	87	2,275	1,824,166 96	2,452,251 51		628,084 55
1878-'79	88	2,359	1,947,706 61	2,812,523 86		864,771 14
1879-'80	104	2,688	2,363,693 14	3,068,797 14		705,104 00
1880-'81	109	2,861	2,499,911 54	3,273,630 39		773,718 85
1881-'82	112	3,115	2,623,262 74	3,816,576 00		1,193,313 35
1882-'83	154	3,680	3,173,336 51	4,195,230 52		*1,021,894 01

*The apparent reduction in excess of postage on local matter for the last year is accounted for by the increased expenditure ($3,173,336.51) required by the act of August 2, 1882.

In 1864–'65 the cost per letter for delivery at 9 of the principal cities was 1.1 cents each, as against 2.4 mills for the delivery and collection of each piece of mail matter in 154 cities in 1882–'83, a reduction of 8.6 mills per piece. The report of the Superintendent of Free Delivery contains other interesting information in regard to the working of the system.

LEASES.

The only authority for renting buildings to be occupied as post-offices is the annual appropriation for the payment of their rent. Under it the Department cannot take a lease for more than one year. For obvious reasons, landlords demand a higher rate for one year than for several years. It has been the practice of my predecessors to take leases from one to ten years, and sometimes for a longer period. All leases for more than one year are now made subject to the condition that Congress shall make the necessary appropriation to pay the rent. I recommend that authority be given to the Postmaster-General to rent at reasonable rates suitable buildings for four years, or such other time as may be deemed advisable. This subject is fully discussed in the report of the First Assistant Postmaster-General.

SALARIES OF PRESIDENTIAL POSTMASTERS.

The number of Presidential postmasters is now two thousand one hundred and ninety-five, and the aggregate sum of their annual salaries according to the adjustment for October 1, 1883, under the new law will be about $3,750,000. As these salaries are now based upon gross receipts, the sum required to compensate postmasters depends largely upon the condition of the business interests of the country, and upon the result (as yet problematical) of the recent reduction of the rate of letter postage from three to two cents. What disturbing effects the approaching national election may have upon business cannot be foreseen, but assuming that the present industrial and commercial prosperity shall continue, as we have reasonable grounds to expect, the adjustment of salaries of Presidential postmasters for the fiscal year ending June 30, 1885, will involve, in round numbers, not less than four million dollars.

SALARY AND ALLOWANCE DIVISION.

The duties assigned to this division devolve mainly upon its chief clerk, subject, however, to the supervision of the First Assistant Postmaster-General and the ultimate control of the Department. The appropriation for clerk-hire for the last year, at offices of the first and second classes, numbering 587, was $4,385,000. Without saying the allowances to some of the smaller offices of the classes named were inadequate, it seems clear that the sums allowed to a number of the larger ones were excessive. It is well known that as the receipts of a

business increase the expenses may be relatively reduced; in other words, that a large business can be carried on with a less percentage of the gross receipts than a smaller one. While this rule cannot be rigidly applied in making allowances to postmasters for clerk-hire, it should nevertheless serve as a general guide. That it has not done so will appear from the following:

The gross receipts at Buffalo for the last fiscal year were $326,067; the amount expended for clerk-hire was $30,500, or 9.3 per cent.

The gross receipts at Rochester were $249,333; the amount expended for clerk-hire was $19,627, or 7.8 per cent.

The gross receipts at New York City were $4,413,822; the amount expended for clerk-hire was $802,935, or 18.2 per cent.

The gross receipts at Detroit were $314,549; the amount expended for clerk-hire was $37,012, or 11.8 per cent.

The gross receipts at Cleveland were $315,663; the amount expended for clerk-hire was $40,277, or 12.7 per cent.

The gross receipts at Saint Paul were $183,955; the amount expended for clerk-hire was $20,253, or 11 per cent.

The gross receipts at Peoria, Ill., were $71,395; the amount expended for clerk-hire was $6,504, or 9 per cent.

The gross receipts at Chicago were $1,949,199; the expenditure for clerk-hire was $354,806, or 18.2 per cent.

The gross receipts at Springfield, Mass., were $78,624; the amount expended for clerk-hire was $7,352, or 9.3 per cent.

The gross receipts at Lowell, Mass., were $78,334; the amount expended for clerk-hire was $5,596, or 7.1 per cent.

The gross receipts at Boston were $1,508,218; the amount expended for clerk-hire was $250,638, or 16.6 per cent.

Similar instances of inequality will appear by reference to the table appended to this report marked II, showing the gross receipts at offices of the first and second classes, the allowance for clerk-hire and other expenses separately, the percentage of gross receipts allowed for expenses, and the percentage of gross receipts allowed for clerk-hire alone at these offices, not including the amount expended in paying clerks in the money-order department.

After making due allowance in favor of the office at New York for handling the bulk of the foreign mails, and in favor of that office, and the offices at Chicago, Boston, and at other large cities, for the exacting demands made upon them growing out of the magnitude of the commercial and business interests which they were required to serve, the allowance for clerk-hire at these offices still seems to have been more than was demanded by necessity.

Many clerks designated, not, however, by statute, as assistant postmasters, superintendents of division, cashiers, auditors, &c., were paid salaries ranging from $3,000 to $3,500, and many more were paid salaries ranging from $2,000 to $3,000. Postmasters, backed as many of

them are by influential friends, have, in some cases, been unreasonable in their demands for allowances, and it is not surprising that some of them have received more than their share of the appropriation while others have received less.

The estimate for clerk-hire for the next fiscal year, it will be observed, is relatively smaller than the appropriations for previous years.

I have directed a general revision to be made of the allowances for clerk-hire, and hope to be able to make some reductions without impairing the efficiency of the service.

STATIONERY IN POST-OFFICES.

The new method of furnishing post-offices of the first and second classes with stationery, which was put in operation on the 1st of July last, has shown very satisfactory results. Under the old system postmasters at such offices, now six hundred and ninety in number, were authorized to supply themselves by purchase; but the quantities bought and the prices paid varied to such an extent that it was deemed advisable to change the method, and, in lieu of it, invite proposals for the necessary supply and contract with the lowest responsible bidder. Postmasters entitled to stationery must now apply to the Department before the beginning of each fiscal year for such quantity as in their opinion will be needed during the year. It is believed that under the contract system the cost of this article will be materially diminished.

POSTMARKING STAMPS, LETTER BALANCES, AND CANCELING-INK AND PADS.

An adequate appropriation should be made for these articles for the next fiscal year. Many of the fourth-class post-offices are not fully provided with them, and some have none at all. This has resulted in complaints that mail matter is either insufficiently rated or obscurely stamped.

PRESIDENTIAL POST-OFFICES.

The salaries of Presidential postmasters have been adjusted on the basis of the gross receipts, as required by the act of Congress approved March 3, 1883. This was never done before.

The gross receipts of the 2,193 Presidential offices for the fiscal year ending June 30, 1883, amounted to $33,535,253.95, or 74.28 per cent. of the entire revenue of the Department for the same period, while the fourth-class offices, 45,650 in number, yielded only $11,614,746.05, or 25.72 per cent. of the revenue.

The salaries of postmasters at Presidential offices amounted in the aggregate to $3,707,500, or 11.06 per cent. of the gross receipts.

In this connection I invite careful attention to the accompanying table, marked III, showing, by States and Territories, the number of Presidential offices, with their gross receipts and the amount paid postmasters as salaries.

REIMBURSING POSTMASTERS FOR LOSSES.

The act of March 17, 1882, providing for reimbursement of postmasters who sustained losses by burglary, fire, or other unavoidable casualty, embraces all claims which accrued within fifteen years prior to its passage. One thousand nine hundred and forty-four claims were filed during the last fiscal year. Of these, 825 were disposed of; 274 were allowed, amounting to $40,241.45. Of this amount, $26,331.56 was on account of stamps, and $13,989 on account of money-order funds. One hundred and eighty-two claims, amounting to $27,772.84, were disallowed, and 369 were abandoned or withdrawn. A detailed report, embracing all the cases acted upon up to December 1, will be prepared in accordance with the requirements of the act, and submitted to Congress early in the session.

STATISTICS OF INLAND MAIL-SERVICE, JUNE 30, 1883.

Railroad service: Number of routes, 1,513; length of routes, 110,208 miles; annual transportation, 129,198,641 miles; annual cost, including expense of railway post-office cars and railway postal clerks, $17,720,229, about 10.75 cents per mile.

Steamboat service: Number of routes, 115; length of routes, 16,093 miles; annual transportation, 4,062,878 miles; annual cost, $607,621, about 14.96 cents per mile.

Star service: Number of routes, 11,327; length of routes, 226,865 miles; annual transportation, 77,998,782 miles; annual cost, $4,739,478, about 6.08 cents per mile.

There were 4,944 contractors for carrying the mails on inland routes. The number of offices supplied by mail-messengers was 5,066, at an annual cost of $803,338.

The number of special offices was 2,631, each supplied by a special carrier, who is compensated out of the Treasury in a sum not exceeding two-thirds of the salary of the postmaster.

An exhibit of the service with tabular statements appears in the report of the Second Assistant Postmaster-General.

TRANSPORTATION.

The cost of inland mail transportation for the year ended June 30, 1883, was $19,234,899, being a total increase of but $353,847, or about 1.9 per cent., over the cost of the same items for the previous year.

STAR SERVICE.

The present status of the star service shows for 1883 a cost of $4,739,478, with 77,998,782 miles of annual transportation, against a

cost of $7,321,499, with 76,070,995 miles of annual transportation, in 1880, being an increase from 1880 of 1,927,787 miles of transportation and $2,582,021 decrease in cost. This service is now all performed under contracts made upon proposals submitted in response to advertisements. The only change in the contract rate of pay, fixed by competition, has been for increase or decrease in trips or distance, and it may therefore be said to be upon a healthy basis. The sharp competition brought about by speculating bidders has so reduced the compensation for carrying the mails on star routes as to preclude the employment of any other than the cheapest outfits, and, while the mails may be dragged through on schedule time, the result is accomplished by means inferior to those used in private business.

To secure the superior grade of service desired, restrictions have been placed upon subletting by prescribing a form of subcontract through which greater responsibility is imposed upon those undertaking to render the service. It is expected that this will add somewhat to the cost, but it will undoubtedly result in a material improvement in the service.

LEGISLATION ASKED.

I invite the particular attention of Congress to the suggestions of the Second Assistant Postmaster-General that sections 3953 and 3961 of the Revised Statutes, and the proviso of the second section of the act of April 7, 1880, be repealed. Section 3953 imposes a restriction upon bidding by requiring a deposit of certified checks with certain bids. This is not believed to be beneficial to the Department in any way whatever. Section 3961 and that proviso prescribe an indefinite and, in my judgment, an unwise basis upon which to compute the allowance for expedition of service on star routes. I approve the suggestion that the Postmaster-General be authorized to readvertise the service in cases where expedition is required.

The rejection of bids for cause involves a delicate duty. It should not be in the power of an executive officer to exclude persons from bidding except for causes prescribed by law. The law, however, prescribes two causes only for such exclusion, viz, willfully or negligently failing to perform a former contract, and entering into a combination to prevent bidding. To these should be added the restrictions suggested by the Second Assistant Postmaster-General.

RAILROAD SERVICE.

An interesting statement, showing the development and cost of the railroad service from its commencement to June 30, 1883, is presented. It is the general opinion that the rates of pay have been greatly increased of late years; the fact is otherwise. The cost per mile of transportation in 1854 was 11.4 cents; in 1883, notwithstanding the enormous increase in the weight of mails and the superior facilities provided for distribution, the cost is 10.75 cents per mile. This, however,

does not affect the question whether the present rates are more or less than a fair and reasonable compensation.

Attention is called to the table accompanying the report of the Second Assistant Postmaster-General showing the comparative cost of this service from year to year since its organization. The large expansion of the system in late years and its general use for postal purposes render the question of just and reasonable rates for the service of vital importance.

I refrain from discussing the question at present, as my views will be given in a separate report, when the committee now considering it shall have submitted their conclusions.

STAR-ROUTE SUITS.

It has become my duty since assuming the direction of the business of this Department to consider the cases upon which payments have been made for expedition in the transportation of the mails on star routes, and after mature deliberation I am convinced that excessive and unjustifiable allowances have been made for expedited service.

The papers and reports in these cases are of such a nature that, under the provisions of section 4057, Revised Statutes, I have felt constrained to submit the facts and a statement of account in each case to the Department of Justice, with a request that suits be brought for the recovery of the moneys fraudulently obtained.

PACIFIC RAILROAD COMPANIES.

The relations between the Government and the companies owning the subsidized Pacific roads are unsettled and unsatisfactory.

For some years the entire earnings of these companies, whether from their own or from leased or operated lines, have been treated as a credit against their indebtedness to the United States. During the past year it has been decided by the courts that the amounts earned on non-subsidized roads must be paid to the companies; this adds over $500,000 per year to the amount necessary to be appropriated for railroad transportation. Hereafter only the earnings of the subsidized companies will be credited by the Treasury as payments on their indebtedness to the United States. These earnings are proper items of cost against the revenues of the Department, and should be so treated. Another complication in this connection grows out of the demand of the Union Pacific and the Central Pacific companies claiming that, under certain provisions of the statute creating them, they are entitled to exceptional rates of compensation of about double those paid to other companies under the general laws. Considering that there are other lines between the Missouri River and the Pacific Ocean, the question forced upon this Department is to what extent it is proper to use these subsidized lines for postal transportation.

THE RAILWAY MAIL SERVICE.

The report of the general superintendent of the railway mail service shows satisfactory progress in that important branch.

At the close of the fiscal year there were 993 railway post-office lines, as against 769 the previous year, an increase of 224; 1,977 crews, as against 1,964 the previous year, an increase of 13; and 108,933.10 miles run by clerks from post-office to post-office, as against 98,287.2 miles the previous year. The miles of route for which the companies were paid were 109,827, as against 100,563 last year, an increase of 9,264 miles, on which there was performed 86,180,430 miles of annual service, as against 75,741,438 miles the previous year, an increase of 10,438,992 miles. The total number of postal cars in use and in reserve was 408, as against 342 the previous year, an increase of 66. Total number of apartments 1,542, as against 1,462 the previous year, an increase of 80. Total number of letters and pieces of ordinary mail matter handled, 3,981,516,280, as against 3,433,390,480 the previous year, an increase of 548,125,800 pieces, or 15.96 per cent. The errors made were 958,478, or one to every 4,153 pieces. The total number of registered packages and registered pouches handled was 16,234,715, as against 14,804.793 the previous year, an increase of 1,429,922, or 9.65 per cent.

Post-office cars were not placed on 14,773 miles of railroad because the business would not justify the expenditure.

In 4,265 case examinations, at which 4,701,444 cards were handled, the average percentage in favor of the clerks was 87.46.

At the close of the year there were 3,855 railway postal clerks, an increase of 2.85 per cent. over the preceding year, while the increase in annual salaries paid averaged only 47 cents per clerk.

The superintendent asks for an appropriation for the next fiscal year of $4,295,289.60, an increase of $318,169.60 over the current year, which seems to be reasonable.

An increased appropriation of $50,000 is asked to pay for additional postal cars.

Clerks in this branch of the service are appointed on probation for six months, during which time they are frequently examined to test their fitness. Only those who are then found to be capable receive permanent appointments. This practical application of civil-service rules has been productive of excellent results.

During the year there were 114 casualties, in which one clerk was killed, 35 seriously injured, and 42 slightly injured. I renew the recommendation of my predecessors that the Postmaster-General be authorized to pay the widow or the guardian of the minor children of a railway postal clerk who is killed in the service a sum equal to one year's salary of the grade which he held at the time of his death.

THROUGH MAILS FOR THE NORTHERN PACIFIC COAST.

Through mails for and from Oregon, Washington Territory, Alaska, and British Columbia are now dispatched by way of Saint Paul and the

Northern Pacific, instead of over the Union Pacific and the Utah Northern to Blackfoot Junction, and thence over the Northern Pacific, as heretofore. The former line is 265 miles shorter than the latter, and, on the assumption that the debt due from the Union Pacific company to the United States will ultimately be paid, it is $31 per ton cheaper. In addition to the argument of economy, the convenience of the people living on the Northern Pacific coast seemed to demand this change. The amount paid the Northern Pacific for this service, on the basis of the present weight of the mails, will be something less than $25,000 per year.

THE POSTAL MONEY-ORDER SYSTEM.

During the past year there was a steady increase of the money-order business.

On the 30th of last June there were 5,927 money-order offices in operation, whose transactions during the year, of domestic orders issued, amounted to $117,329,406.31, and of domestic orders paid and repaid to $117,344,281.78; of international orders issued, to $7,717,832.11, and of international orders paid and repaid, to $3,063,187.05; a grand total in issues of $125,047,238.42, and in payments and repayments of $120,407,468.83. The fees received on domestic orders issued aggregated $1,101,821.80, and on international orders $170,238.80; a total of $1,272,060.60. The gains were, in domestic transactions about 3½ per cent., and in international transactions from 1.85 to over 56 per cent.; in domestic fees about 4½ per cent., and in international fees from 0.56 to over .54 per cent.

The gross revenue for the last fiscal year from domestic money-order business was $311,704.67; and from international money-order business for the year ended June 30, 1882, it was $99,914.70. There was a net profit of $159,104.34 after all expenses paid from appropriations had been deducted.

The superintendent of the money-order system states that the new postal notes, the issue of which was authorized by the act of March 3, 1883, are being extensively employed for remittances of small sums, and reports that the postal notes paid at the New York City post-office from the commencement of business on September 3 until October 20, 1883, numbered 57,374, and amounted to $106,854.31, while during the same time 89,126 money orders were paid, amounting to $1,136,498.81. The other provisions of the act modifying the postal money-order system, have been duly put into effect, as stated in his report.

I invite special attention to his recommendation that all the fees received from the issue of money-orders and postal notes be deposited, like other postal proceeds, in the Treasury, for the service of the Post-Office Department, and that all expenses of that system be provided for by appropriations made by Congress, not specially for the money-order business, but included in the appropriations for the general service of this Department.

e of those expenses are now defrayed directly from the fees
ed from the public; others out of appropriations. Special pro-
having been made by the act of March 3, 1883, for the compen-
of those engaged in the transaction of the money-order business,
ecessary to maintain a distinction between their clerical labor and
erformed in the general postal business. It would greatly simplify
stem if provision were made by one appropriation for the clerical
of all kinds in post-offices. I urgently recommend legislation to
fect.

OF POSTAGE-STAMPS, STAMPED ENVELOPES, AND POSTAL CARDS.

number and value of postage-stamps, stamped envelopes, and
cards issued upon requisitions during the year were as follows:

	Number.	Value.
postage-stamps	1,202,743,800	$30,307,179 00
er and periodical stamps	2,207,939	1,752,564 50
envelopes, plain	114,251,950	2,831,096 87
envelopes, request	100,578,250	3,129,774 15
er wrappers	44,436,250	530,188 75
lue stamps	12,609,900	404,915 90
rds	379,516,750	3,796,090 00
ostage-stamps	2,575,830	125,839 20
amped envelopes and wrappers	2,769,000	32,671 20
gregate	1,861,689,669	42,910,319 57

requisitions upon which these supplies were issued number
7.
issues will appear more fully in detail in Tables No. 5 to No. 8,
appendix to this report.

POSTAGE ON SECOND-CLASS MATTER.

amount of postage collected on second-class matter during the
as $1,705,177.53, an increase of $140,074.25, or 9.01 per cent., over
evious year.
he receipts from this source, 26.40 per cent. was collected at New
8.37 per cent. at Chicago; 6.50 per cent. at Boston; 5.20 per
t Philadelphia; 4.57 per cent. at Saint Louis; 3.70 per cent. at
nati; 1.42 per cent. at Augusta, Me.; 1.80 per cent. at San Fran-
1.43 per cent. at Detroit; 1.39 per cent. at Milwaukee; 1.26 per
t Louisville; 1.30 per cent. at Cleveland; 1.05 per cent. at Pitts-
; 1.07 per cent. at Saint Paul; .90 per cent. at Toledo; .87 per
t Baltimore. The remaining 32.72 per cent. was collected at 5,333
ffices.

DEAD LETTERS AND PARCELS.

total number of undelivered letters and articles of third and
class matter received at the dead-letter office during the year,

(including 61,424 on hand from the previous year,) was 4,440,822, an increase of about 4 per cent. over the year ended June 30, 1882. In their treatment they were classified as follows: Unclaimed domestic letters, 3,476,522; unclaimed domestic parcels, 63,947; foreign letters, 405,348; letters and packages addressed to foreign countries but containing articles declared unmailable by the international postal treaties, 1,345; undelivered parcels of foreign origin containing printed matter, samples, &c., 19,960; domestic held-for-postage, 181,584; misdirected, 280,137; wholly without address, 11,979.

At the close of the preceding fiscal year there were 1,454 letters containing $2,880.51 on hand in the office awaiting final disposition; also 1,325 letters containing $2,870.84 in money, and 969 letters containing $160,897.81 in drafts, checks, &c., outstanding in the hands of postmasters.

Of the letters and parcels which were opened during the year for the purpose of restoring them to the writers, 15,301 were found to contain money, amounting to $32,647.23; 18,095 contained drafts, checks, money-orders, &c., representing a value of $1,381,991.47; 96,808 contained merchandise, samples, books, and miscellaneous articles; 66,137 contained postage-stamps; 40,215 contained receipts, paid notes, canceled drafts, insurance papers, &c.; 35,160 contained photographs. From letters for which the Department failed to find owners the sum of $7,782.16 was separated and deposited in the United States Treasury. This sum included $1,040.30 of uncurrent money which had been separated from undelivered letters in previous years, but converted into depositable funds since the beginning of this fiscal year. The proceeds of the dead-letter office sale in December last amounted to $4,497.67, which sum was deposited in the Treasury to the credit of the Post-Office Department. The value of stamps received to pay postage upon parcels of third and fourth class matter returned to the senders, and upon insufficiently prepaid letters forwarded to the addressees, was $3,693.27.

In the report of the Third Assistant Postmaster-General, in tables numbered 9 to 16, may be found more explicit information as to the classification and methods of treatment of matter reaching the dead-letter office.

TREATMENT OF HELD-FOR-POSTAGE MATTER.

The new mode of treating held-for-postage matter, by which the addressees are invited by postmasters to remit the postage and receive the matter directly from the mailing office, and thus prevent it from going to the dead-letter office, was found to work so satisfactorily at the free-delivery offices that an order was issued on May 19, 1883, extending it to all the Presidential offices, to take effect on July 1, 1883. The plan is operating with equally good results at the additional offices to which it was extended by the order.

REGISTRATION.

The number of letters and parcels sent through the registered mails during the year was 10,594,716, of which 7,849,827 were domestic letters; 444,789 were letters addressed to foreign countries; 948,075 were domestic parcels of third and fourth class matter; 22,806 were parcels of third and fourth class matter to foreign countries; and 1,329,219 were letters and parcels of official matter for the Government, by law free from the payment of registry fees. The amount of registry fees collected was $926,549.70, an increase of $85,057.80, or 10.10 per cent. over the previous year. The actual and estimated losses (a number of cases still being under investigation), were only 627, or, say, one out of every 16,897 letters and parcels forwarded. This small proportion of loss is unprecedented.

FOREIGN MAILS.

The report of the superintendent of foreign mails presents a satisfactory condition of our postal relations and intercourse with foreign countries. The volume of the correspondence exchanged with foreign countries increases rapidly from year to year under the operation of the greatly reduced and uniform postal charges established throughout the Postal Union.

The total weight of the mails dispatched to Postal Union countries, exclusive of Canada, during the last fiscal year was 2,532,990 pounds (1,266 tons), an increased weight of 329,114 pounds (164 tons) over that of the preceding year. The weight of the letter mails was 481,477 pounds, and of the printed matter and sample mails 2,051,513 pounds, an increase compared with the preceding year of 67,122 pounds of letters, and 261,992 pounds of printed matter and samples.

Of the correspondence dispatched 41.32 per cent. of the letters and 41.35 per cent. of the printed matter, samples, &c., were sent to Great Britain; 23.01 per cent. of the letters and 17.30 per cent. of the prints, samples, &c., were sent to Germany; 26.91 per cent. of the letters and 20.69 per cent. of the prints, samples, &c., were sent to other countries of Europe, and 8.76 per cent. of the letters and 20.66 per cent. of the prints, samples, &c., were sent to Postal Union countries other than those of Europe. Compared with the weights of the preceding fiscal year, the letter mails were increased 16.20 per cent. and the printed matter and sample mails 14.64 per cent. Compared with the weights for the fiscal year 1880, the percentage of increase in three years was 76.90 per cent. for the letter mails, and 73.65 per cent. for the printed matter and samples.

The cost of the ocean transportation of mails to foreign ports, under the general law restricting the compensation to the postages on the mails conveyed, was $316,522.13, an increase of $36,358.15 over the cost of the same service in 1882. Of this amount $263,621.52 was reported for the transatlantic service, $19,251.14 for the transpacific service, and

$33,649.47 for service to the West Indies, Mexico, Canada, Newfoundland, and countries of Central and South America. The increased cost over that of the same service in 1882 was nearly 13 per cent. Compared with the cost of the ocean service in 1880, the increase in three years was over 59 per cent.

The amount of the territorial and sea-transit charges on the United States mails forwarded over the territories and by sea services of intermediary Postal Union countries was 449,600 francs and 68 centimes ($86,745.91), and the amount credited to the United States by other countries of the Postal Union for the United States territorial and sea-transit on mails dispatched by those countries was 755,323 francs and 64 centimes ($145,777.46), of which 598,572 francs and 59 centimes ($115,524.50) was for the transit across our continent, between New York and San Francisco, of the British and Australian closed mails.

Initiatory steps are being taken by five of the seven British colonies in Australasia and by Cape Colony for admission to the Universal Postal Union. These are now the only large groups of colonies not embraced in the Postal Union.

An actual count of the mail matter exchanged with foreign countries, taken during seven days in October, 1882, and seven days in April, 1883, gives the following approximate estimate of the foreign mail exchanges during the last fiscal year:

Total number of letters sent	29,913,504
Total number of letters received	27,659,768
Total number of packets of newspapers, business papers, and samples sent	29,559,338
Total number of such packets received	19,269,632
Prepaid postages on letters sent	$1,450,078 90
Prepaid postages on printed matter, &c., sent	$451,357 92
Unpaid postages collected on letters, printed matter, &c., received	$145,148 46
Postage on postal cards sent	$32,328 26
Total postages collected in the United States	$2,078,913 54

This count also shows:

1. That of the correspondence exchanged 52 per cent. of the letters, 55 per cent. of the postal cards, and 60 per cent. of other mail matter was dispatched from the United States.

2. That 97½ per cent. of the letters sent to foreign countries were fully prepaid, 2 per cent. were unpaid or insufficiently prepaid, and one-half of 1 per cent. were free of postage.

3. That 94½ per cent. of the letters received from foreign countries were fully prepaid, 5¼ per cent. were unpaid or insufficiently prepaid, and one-fourth of 1 per cent. free of postage; and

4. That the estimated amount of postage collected in the United States on unpaid mail matter *received*, exceeded the estimated amount of the unpaid postage on mail matter *sent* in the sum of $123,333.68.

The general statistics of the Universal Postal Union for the calendar year 1881, collated and published by the International Bureau, of which

a synopsis is given in the report of the superintendent of foreign mails, show that the postal service of the United States in its extent, usefulness, and general efficiency compares favorably with that of other nations, and in many important particulars takes a leading rank among the principal Union countries.

I invite attention to the subjects requiring legislation mentioned in the report of the superintendent of foreign mails, and renew the recommendations of my predecessors for such legislation as will enable this Department to carry into effect the provisions of Article 6 of the Convention of Paris, relating to indemnities for losses of registered letters in the mails; and also to enable the Secretary of the Treasury and the Postmaster-General to adopt regulations for the transmission to addressees, through the mails, of such dutiable articles of mail-matter as may be received in the mails from other countries.

MAIL STEAMSHIP SERVICE TO AUSTRALASIAN COLONIES.

For many years past the mails have been transported between San Francisco, Auckland, New Zealand, and Sydney, New South Wales, by a monthly line of United States steamships, under contract with the Colonial Governments of New Zealand and New South Wales, and receiving from those Governments an annual subsidy of about $400,000. The only special grant of money in aid of this steamship line made by Congress was an appropriation of $40,000 for the fiscal year ended June 30, 1882, one-half of which was paid to each of the colonies as reimbursement, in part I infer, for the expenses of that service. This Department has, however, paid to this line, each year, the sea-postages upon the mails transported from San Francisco to the colonies. These postages for the last fiscal year amounted to the sum of $12,533.89. I am informed that the original contract between these colonies and this line, has been renewed at a reduced rate of compensation, and it is alleged that the continuance of this contract and service is dependent upon the action which Congress may take in regard to an increased compensation to the line. Two routes are used for mail communication between Great Britain and the British colonies in Australasia, one by the heavily subsidized lines of British mail packets via Suez and the Indian Ocean, and the other across our continent via New York and San Francisco and the steamship line above referred to. The route via Suez, by reason of its less distance to many of the colonies, or the greater speed of the British packets employed, is ordinarily the quickest for all the colonies except New Zealand. New Zealand being much nearer England by the San Francisco route, the English mails to and from that colony are greatly expedited by transmission across our continent. Hitherto, a bimonthly mail service only has been maintained between Great Britain and her Australasian colonies via Suez, but recently official notice has been given by the London office that the government of New South Wales has contracted for the conveyance of a second

fortnightly mail between Suez and Australia, in connection with the Indian mail service via Brindisi, the steamers to run alternately with those of the Peninsular and Oriental Steam Navigation Company, thus establishing for the future a regular weekly mail service by British packets between England and Australia. It seems probable that this increased frequency of mail service via Suez will give additional advantages to that route, and lessen the amount of mail-matter to be hereafter forwarded between Great Britain and her colonies by the San Francisco route. The United States territorial transit charges on the British and Australian closed mails forwarded across our continent during the calendar year 1882 amounted to $115,524.50. The continuance of direct steamship communication with the colonies of Australasia is of no little importance to the business interests of the country, and it devolves upon Congress to direct the policy to be pursued in respect to it. The present United States line of steamers to Honolulu, Auckland and Sydney, and the United States steamships which ply regularly to and from ports of Brazil, are undoubtedly the most important to our people in a commercial point of view.

TRANSPORTATION OF OCEAN MAILS.

The compensation for transporting the mails to foreign ports is restricted by law to any sum not exceeding the sea and United States inland postage, if the conveyance is by a United States steamship, and to any sum not exceeding the sea-postage on the mails transported, if the conveyance is by a foreign steamship or by a sailing vessel. Hitherto, except for the mails conveyed by United States steamships from Philadelphia to Liverpool, and for the mails transported to and across the Isthmus of Panama, no discrimination has been made in the compensation paid for carrying the mails on the sea, and the sea-postage only has been allowed and paid for all ocean services, without regard to the nationality of the steamships employed. As the annual appropriations for the transportation of foreign mails have always been based upon estimates of the amount of sea-postage to accrue thereon, no greater compensation can be paid. Complaints are made by the proprietors of United States steamships carrying our mails to distant ports of the insufficiency of this compensation, and it has become a question for careful consideration whether the sea-postages, or even the full postages, sea and inland, can be regarded as affording a reasonable compensation to such lines of United States steamships as transport our mails regularly over routes of great length to transpacific, Central, and South American ports. The sea-postage upon the heavy mails conveyed from New York to transatlantic ports, yields to the foreign steamship lines transporting them an adequate remuneration for that service; but on account of the small amount of mail matter conveyed to South American and transpacific ports, the same measure of payment yields a less adequate compensation.

The amount of sea-postage upon the mails dispatched during the year over the principal ocean routes was as follows:

From New York to ports of Great Britain and the Continent of Europe, 385 trips by foreign steamships of seven different lines, $256,775.14, averaging $667 per trip.

From San Francisco to ports of Japan and China, 32 trips by United States and foreign steamships, $3,925.66, averaging $122.67 per trip.

From San Francisco to the Hawaiian Islands, New Zealand, and the Australian colonies, 14 trips by United States steamships, $12,533.89, averaging $895.27 per trip.

From New York to Aspinwall, with mails for Central America, Mexico, and west coast of South America, 38 trips by United States steamships, $4,996.28, averaging $131.21 per trip.

From New York via Havana to Vera Cruz, Mexico, 46 trips, by United States steamships, $4,484.76, averaging $94.79 per trip.

From New York and Newport News, Va., to ports of Brazil, 37 trips by United States steamships, $4,450.06, averaging $120.27 per trip.

If the entire postage, sea and inland, had been allowed and paid to United States steamships, the earnings of five of these steamship lines would have been increased as follows:

Line from San Francisco to Japan and China, to about $20,000, or $625 per trip.

Line from San Francisco to Australian colonies, to about $25,000, or $1,785 per trip.

Line from New York to Aspinwall, to about $25,000, or $650 per trip.

Line from New York to Vera Cruz, to about $22,500, or $490 per trip; and,

Line from New York and Newport News to Brazil, to about $6,200, or $167 per trip.

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These statements show the payments actually made and also the maximum compensation that could have been paid under existing laws for the transportation of the mails by United States steamships upon five of the principal steamship routes to transpacific, Mexican, Central and South American ports. If in the judgment of Congress the sea-postage on the mails transported affords an insufficient compensation for such services, any greater allowance, within the maximum limit of the full postage, sea and inland, which may be considered a fair compensation, may be paid without changing the present law, by simply increasing the appropriation for the transportation of the foreign mails to a sum sufficient to meet such additional allowance. The estimate for this service, on the basis of sea-postages only, for the fiscal year ending June 30, 1885, is $425,000. To enable this Department to pay the full postages to United States steamships on the mails conveyed during that year, an additional sum of $200,000 must be added to this estimate. But if in the judgment of Congress the present law

does not provide a just remuneration for ocean mail service by United States steamships, it should be so amended as to authorize the allowance of an increased compensation to such steamships of a prescribed amount, which shall bear a relation to the amount of mail-matter transported and the character of the service to be rendered. Simple justice requires that a reasonable compensation be allowed to our own steamship lines conveying the United States mails to foreign ports. I can only consider the needs of the postal service between this and other countries, and recommend such legislation as will tend to promote its efficiency. No one questions the importance to the postal or business interests of the country of maintaining frequent, regular, and rapid mail communication with the neighboring countries of Central and South America, the Australasian colonies, and the populous countries of Eastern Asia.

MAIL DEPREDATIONS.

The report of the Chief Post-Office Inspector sets forth the operations of this branch of the service. The duties of inspectors are delicate and important, and their faithful discharge contributes in a marked degree to the purity and efficiency of the service. The total number of cases referred to inspectors for investigation during the year was 47,736, and the total number of arrests made for violations of the postal laws was 596.

TOPOGRAPHER'S OFFICE.

Important improvements have been made in this office during the past year, embracing changes in the organization of the working force and in the method of producing post-route maps. The result is that the maps are produced in greater number, at much less expense and in a more satisfactory style than formerly. These maps are of great use in the various branches of the postal service, and as each successive issue is corrected up to date they form a continuous history of the progress and changes of post routes. The report of the Topographer contains details in regard to the operations of the office.

POSTAGE ON DROP-LETTERS.

Some desire has been expressed for a reduction of postage on drop-letters, from two cents to one cent. That two cents should be charged for delivering a letter in the city where it is mailed, while the same price will transport it across the continent, is said to be anomalous. Whatever force there may be in this argument might be urged against charging the same price for carrying a letter from New York to Brooklyn as for carrying one from New York to San Francisco. The plan of rating postage according to the distance of the carriage was wisely abandoned almost forty years ago. It might be said that it is an anomaly to charge two cents for carrying a letter weighing half an ounce when that sum will carry two ounces of merchandise or four ounces of

books. It might be plausibly urged as equally inconsistent for the Government to hire a carrier in one city to deliver letters at a charge of one cent each, and in another city compel the people to go to the post-office for their letters on which a similar charge is exacted. If the proposed change is made, two cents will be charged for carrying a letter from the New York post-office to Jersey City, and only one cent for carrying a letter from the New York post-office to Westchester County, within the delivery limits of that office.

The free-delivery system was established on the 1st of July, 1863, leaving the drop-letter rate uniform at one cent at all offices. This rate was maintained until the act of June 8, 1872, increased it at carrier offices to 2 cents, in order to defray the cost of the carrier service. That cost had theretofore largely exceeded the receipts from local postage, though the system was confined to 52 of the principal cities. For the year ended June 30, 1872, the amount of postage collected on local matter was $907,351.93, and the expenditure of carrier service $1,385,965.76. If the charge for drop-letters is made uniform at all offices, without regard to this service at a portion of them only, the cities and towns not accommodated by carriers will not long remain quiet under the discrimination. It is true that, at the offices where the carrier service is in operation, the total postage on local matter exceeds the total cost of the service; but to claim the entire receipts from local matter as due to the carrier system is manifestly unfair. At the close of the last fiscal year that system was in operation at 154 post-offices. The postage collected on local matter at these offices during the year amounted to $4,195,230.52, and the total cost of the service was $3,173,336.51, an excess of postage of $1,021,894.01.

At 14 offices only did the local postage exceed the cost of the service, as shown in the following table:

Name of office.	Amount of postage on local matter.	Cost of free delivery service including incidental expenses.	Excess of local postage over cost of service.
Atlanta, Ga	$10,103 92	$9,847 87	$256 05
Boston, Mass	337,029 44	225,674 40	111,355 04
Brooklyn, N. Y	236,189 06	122,042 34	114,146 72
Chicago, Ill	336,690 47	225,328 81	111,361 66
Cleveland, Ohio	68,153 39	42,871 95	25,281 44
Denver, Col	13,475 76	12,042 92	1,432 84
Grand Rapids, Mich	10,581 26	9,280 09	1,301 17
Meriden, Conn	3,624 99	3,400 00	224 99
New Haven, Conn	19,419 31	16,494 20	2,925 11
New York, N. Y	1,475,533 38	522,889 80	952,643 58
Philadelphia, Pa	608,653 05	353,158 63	255,494 42
Pittsburgh, Pa	59,574 25	40,354 84	19,219 41
San Francisco, Cal	71,550 54	65,514 54	6,036 00
Topeka, Kans	7,403 97	5,333 14	2,130 83
Total	3,258,042 79	1,654,233 53	1,603,809 26

At the remaining 140 offices the amount of local postage collected was $937,187.73, while the cost of the carrier service at the same offices was $1,519,102.98. At 87 offices the amount of local postage collected

was less than one-half of the expenditure for carrier service. These 87 offices in the aggregate collected $220,559.84 on local matter, and expended $583,356.36 for carrier service, an excess of expenditure of $362,796.52.

A reduction of the local rate to one cent, on the present volume of business, would leave the carrier service a heavy charge upon the general revenues of the Department at every office save that at New York.

It is true that an increase of business is to be expected, but that would require additional carriers, and thus augment the present expense. At few offices, if any, is such an increase probable as would compensate for the loss by a reduction of the rate. Certainly, at a great majority of the offices, where the system is now conducted at a loss, a lower rate would only increase the charge upon the general fund.

The proposed step would lead to a clamor for the extension of the carrier system to an indefinite number of the smaller cities and towns, where its maintenance would be almost wholly at the expense of the general revenue. Such extension will not be urged on the score of profit, and if it be put upon the ground of public convenience it will be difficult to assign a reason for making discriminations, when the local rate is uniform at all offices. A large deficiency of revenue from the carrier service would, it is feared, be followed by scant appropriations for this service, with the result of impairing its efficiency, even at the places where it is now conducted at a profit.

An important reduction of postage has just been effected by changing the domestic letter rate from 3 cents to 2. This change, unlike the one proposed, is of benefit to all the people of the country in proportion to the extent which they patronize the mails. For a time at least, it will sensibly diminish the postal revenue and impose a burden upon the general Treasury.

It would seem to be prudent to wait until the deficiency shall have been recovered, or at least more definitely ascertained, before making a further inroad upon the revenues through a reduction of the present rates of postage. The carrying of the mails should not be looked to as a source of revenue, but the service should be rendered as nearly self-sustaining as possible.

STANDARD OF WEIGHT FOR FIRST-CLASS MATTER.

After careful consideration I am of opinion that the unit of weight for rating first-class matter should be changed from one-half an ounce to one ounce. This change, in connection with the recent reduction of letter-postage from 3 to 2 cents, would place this country on an equality with any other in respect of cheap postage. Great Britain maintains a more liberal unit of weight for rating letters and packages than we do. The following statement shows the rates on different classes of matter in the United States as compared with the leading countries of Europe, the foreign standards of value and weight being reduced to ours:

Comparative statement showing the rates of postage on different classes of matter in the United States and the leading countries of Europe.

Country.	Letters.		Postal cards.	Newspapers	Other printed matter.	Samples.
	Condition of prepayment.	Single rate.				
United States	At least one rate compulsory.	2 cents per ½ ounce or fraction of ½ ounce.	1 cent.	Publishers' rates, 2 cents per pound (second class); private rates, 1 cent per 2 ounces (third class).	1 cent per 2 ounces (third class).	1 cent per ounce (fourth class).
Austria-Hungary	Optional	2 cents per ½ ounce.	1 cent.	Like other printed matter.	½ cent per 1½ ounces.	2 cents for everything below 8½ ounces.
Belgium	Optional under 35 ounces.	2 cents per ½ ounce.	1 cent.	½ cent per copy or per 2½ ounces	½ cent per 1½ ounces.	1 cent per 3½ ounces.
Denmark	Optional	1½ cents for everything under 9 ounces.	1½ cents.	Like other printed matter.	½ cent for everything under 9 ounces.	½ cent for everything under 9 ounces.
France	Optional	3 cents per ½ ounce.	2 cents.	½ cent per copy or per ½ ounces	½ cent per ½ ounce.	1 cent per 1½ ounces.
Germany	Optional	2 cents per ½ ounce.	1 cent.	Subscription made at post-office; 25 per cent. of subscription price.	½ cent per 1½ ounces.	2 cents per 8½ ounces.
Great Britain	Optional	*2 cents per 1 ounce.	1 cent.	1 cent per copy	1 cent per 2 ounces.	Not carried by mail.
Italy	Optional	4 cents per ½ ounce.	2 cents.	Publishers' rates, ½ cent per 1½ ounces; private rates, ½ cent per 1½ ounces.	½ cent per 1½ ounces.	½ cents per 1½ ounces.
Netherlands	Optional	2 cents per ½ ounce.	1 cent.	½ cent per ½ ounce	½ cent per ½ ounce.	1 cent per 2½ ounces.
Norway	Optional	2 cents per ½ ounce.	1 cent.	½ of subscription price for the first $2.70; 1/10 of subscription price for the following $5.40; 1/15 of subscription price for the following $8.10.	½ cent per ½ ounce.	½ cent per ½ ounce.
Portugal	Optional	3 cents per ½ ounce.	1 cent.	½ cent per 1½ ounces	½ cent per 1½ ounces.	½ cent per 1½ ounces.
Russia	At least 5 cents compulsory.	5 cents per ½ ounce.	2 cents.	Publishers' rates, daily publications, 16 per cent. of subscription; weekly publications, 12 per cent. of subscription.	1 cent per 2 ounces.	1 cent per 2 ounces.
Spain	Compulsory	3 cents per ½ ounce.	2 cents.	Publishers' rates, 60 cents per 21 pounds 14 ounces; private rates, ½ cent per copy.	1/10 cent per ½ ounce.	1 cent per ½ ounce.
Sweden	Compulsory	2½ cents per ½ ounce.	1½ cents	½ cent per 1½ ounces	½ cent per 1½ ounces.	½ cent per 1½ ounces.
Switzerland	Optional	2 cents per ½ ounce.	1 cent.	½ cent per 1½ ounces	½ cent per 1½ ounces.	1 cent per 1½ ounces.

*Above 1 ounce, but not above 2 ounces, 3 cents; above 2 ounces, but not above 4 ounces, 4 cents; above 4 ounces, but not above 6 ounces, 5 cents; above 6 ounces, but not above 8 ounces, 6 cents; above 8 ounces, but not above 10 ounces, 7 cents; above 10 ounces, but not above 12 ounces, 8 cents; for any weight above 12 ounces, 2 cents per every ounce.

The following table shows the 2-cent rate per ½ ounce up to the limit of 4 pounds, as compared with the English rate, where the unit of weight is 1 ounce:

Weight.	United States.	England.	Rate at 2 cents per ounce.
To ½ ounce....	2 cents.....	2 cents.....	2 cents.
1 ounce....	4 cents.....	2 cents.....	2 cents.
1½ ounces...	6 cents.....	3 cents.....	4 cents.
2 ounces...	8 cents.....	3 cents.....	4 cents.
2½ ounces...	10 cents.....	4 cents.....	6 cents.
3 ounces...	12 cents.....	4 cents.....	6 cents.
3½ ounces...	14 cents.....	4 cents.....	8 cents.
4 ounces...	16 cents.....	4 cents.....	8 cents.
4½ ounces...	18 cents.....	5 cents.....	10 cents.
5 ounces...	20 cents.....	5 cents.....	10 cents.
6 ounces...	24 cents.....	5 cents.....	12 cents.
7 ounces...	28 cents.....	6 cents.....	14 cents.
8 ounces...	32 cents.....	6 cents.....	16 cents.
9 ounces...	36 cents.....	7 cents.....	18 cents.
10 ounces...	40 cents.....	7 cents.....	20 cents.
12 ounces...	48 cents.....	8 cents.....	24 cents.
14 ounces...	56 cents.....	28 cents.....	28 cents.
16 ounces...	64 cents.....	32 cents.....	32 cents.
20 ounces...	80 cents.....	40 cents.....	40 cents.
24 ounces...	96 cents.....	48 cents.....	48 cents.
32 ounces...	$1.28.....	64 cents.....	64 cents.

The fourth column shows what the rate would be if our unit of weight for first-class matter were changed from half an ounce to one ounce. Our rates would then closely approximate to those now prevailing in England. It is believed that less than 6 per cent. of all the letters conveyed in the mails exceed half an ounce in weight, thus requiring double postage. On these there would be a small loss by increasing the standard of single postage weight to one ounce; but the revenue on the remainder, say 94 per cent. of all, would not be diminished, while the loss on the small number in excess of half an ounce would doubtless be more than compensated by the increased postage on small packages of merchandise which would be sealed and sent as first-class matter. By adopting the ounce standard the people would be still further accommodated, and it is believed that a large proportion of fourth-class matter would be sent under seal, paying first-class postage. The revenue of the Department would thus be increased without materially increasing the bulk or the weight of the mails.

NEWSPAPER POSTAGE.

The postage on third-class matter, embracing newspapers and periodicals sent by others than the publishers, is 1 cent per 2 ounces. Some of the larger newspapers weigh more than 2 ounces. There seems to be a popular impression that 1 cent per copy is the uniform rate for all newspapers. Many persons, under this impression, deposit in post-offices newspapers which weigh more than 2 ounces, and not exceeding 3 ounces, bearing a 1-cent stamp. Such papers are not entitled to be sent, and perhaps as a rule are not sent. This creates dissatisfaction

and complaint. In order to obviate this I recommend that the rate of postage on newspapers and periodical publications sent by others than the publishers or news agents, be made 1 cent per 3 ounces.

PRIVATE EXPRESSES.

When I assumed control of the Department a number of private expresses in New York were engaged in receiving and delivering letters and circulars in that city in violation of section 3984, Revised Statutes. The matter had been previously called to the attention of the Department, and steps taken to protect the Government's interests. Being satisfied that these companies were engaged in an illegal business, I deemed it my duty to call upon the Department of Justice to enforce the penalty prescribed by the section referred to. Actions were accordingly instituted and judgments obtained against the offending parties. It is believed that the course pursued will result in a substantial suppression of this unlawful business, and a saving to the Government of many thousands of dollars in revenues.

It will be observed that the statute imposes a penalty not only on the carrier but on the sender of letters. Proceedings were first instituted against the carriers. When, however, it was ascertained that, subsequently to the institution of these proceedings, one of the companies proceeded against was still continuing the business, suits, one hundred and twenty-six in number, were brought against the patrons of the companies.

In a number of these cases the parties paid the penalty, and the suits were discontinued. In other cases the parties sued are contesting. A number of the defendants have appealed to the clemency of the Government, alleging ignorance of the law.

The propriety of remitting the penalties in these cases having been submitted to me by the Solicitor of the Treasury, I have, upon the recommendation of the district attorney, advised that the pending suits against all such persons be dismissed.

LOTTERIES AND THE MAILS.

Postmaster-General Key issued an order, bearing date December 13, 1879, which set forth that it appeared from the evidence submitted to him that M. A. Dauphin, of New Orleans, was then "engaged in conducting a scheme or device for obtaining money through the mails by means of false and fraudulent practices, representations, and promises." The Postmaster-General, in the exercise of the power conferred by sections 3929 and 4041 of the Revised Statutes, forbade the payment of any money-order to Dauphin by the postmaster of that city, and required him to return to the postmasters of the places at which they were originally mailed all registered letters received at his office directed to Dauphin. The order was suspended during the period Dau-

phin was prosecuting in the Supreme Court of the United States an appeal from the decree dismissing his bill of complaint, whereby he sought to enjoin the execution of the order. The appeal was subsequently dismissed, and it then, in my opinion, became the duty of the Department to enforce the order according to its tenor and effect. The Postmaster-General is invested with authority to issue such an order upon evidence satisfactory to him that a case within those sections has occurred. His decision upon the question of fact is final and conclusive, and the matter being one which involves the exercise of his judgment and discretion, his action thereon within the limits of the power conferred is not subject to judicial review. "*All* registered letters" may be withheld from the party, whether a corporation or a natural person, whom the evidence, in the opinion of the Postmaster-General, implicates as being engaged in conducting any fraudulent lottery, gift enterprise, or scheme of the character mentioned in those sections. The power of Congress to enact them cannot be doubted in view of the opinion of the Supreme Court affirming the constitutionality of section 3894, which, as amended by an act approved July 12, 1876, provides that "no letter or circular concerning lotteries, so-called gift-concerts or other similar enterprises offering prizes, or concerning schemes devised and intended to deceive and defraud the public, for the purpose of obtaining money under false pretenses, shall be carried in the mail. Any person who shall knowingly deposit or send any thing to be conveyed by mail in violation of this section shall be punished by a fine of not more than $500 nor less than $100, with costs of prosecution." In Ex parte Jackson, 96 U. S., 727, that court holds that this amended section is constitutional, and that under the power to establish post-offices and post-roads Congress may designate what shall be carried in the mails and what excluded. There can be no doubt, therefore, that the order in question is of binding force.

The person named in the order was at its date, and still is, identified with the Louisiana State Lottery Company, and by him its business and correspondence were conducted. The order, therefore, specifically relates to him. A recent attempt has been made to evade it by the instrumentality of the New Orleans National Bank. It is a singular fact that an institution organized under the national authority for a legitimate banking business should suffer itself to be thus used for the purpose of defeating the policy of Congress. It appears by advertisements in the public papers that persons desiring to purchase tickets in that company are requested to direct their registered letters to that bank, and make their postal money-orders payable to it. It thus renders itself liable to the same provisions that are applicable to Dauphin, for upon full investigation of the facts I am satisfied that it contracted, for a consideration, to act on behalf of him and the lottery company to the extent of transacting the prohibited business, and that it is so acting. It is clear that such a substituted agency, if permit-

ted, would render of no effect the provisions of the statutes. I therefore issued the order appended to this report, marked IV, on the conviction that it was not only the right but the imperative duty of the Department to do so, and that its terms were fully justified by the declared intent and reason of the legislation of Congress. That body, by manifesting a settled purpose that the mails shall not be used to promote the business of lotteries and kindred schemes, and by enacting provisions deemed adequate to secure that result, acted in accordance with an enlightened public sentiment which justly regards such schemes as a source of unnumbered evils. In the language of the Supreme Court, in Stone *vs.* Mississippi 101 U. S., 814, 819, 821: "There is now scarcely a State in the Union where lotteries are tolerated, and Congress has established a special statute the object of which is to close the mails against them. * * * They are a species of gambling, and wrong in their influences. They disturb the checks and balances of a well-ordered community. Society built on such a foundation would almost of necessity bring forth a population of speculators and gamblers." These opinions, thus declared by our highest judicial tribunal have for many years largely prevailed in foreign countries, and shaped, to some extent, their legislation. Lotteries were abolished in England more than half a century ago, and in France they, as well as gambling houses, were suppressed. While, without the exercise of the police power of the respective States, lotteries cannot be prohibited within them, the general Government has, nevertheless, manifested its disapprobation of this species of gambling by declaring that the mails of the United States shall not furnish facilities for carrying it on.

I recommend, as in keeping with our legislation, and with a view to render it more efficacious, the passage of an act providing that every newspaper which contains an advertisement of a lottery, or any agency thereof, shall be excluded from the mails, and rendering the person who deposits it for sending by mail liable to the penalties which, under existing laws, he incurs for so depositing a letter or circular concerning lotteries.

I also recommend that so far as they are applicable the provisions of the Revised Statutes relating to the District of Columbia upon the subject of lotteries be extended to all the Territories of the United States.

It is sometimes urged that a lottery cannot be "fraudulent" within the meaning of the Revised Statutes, if it be organized under State laws, and its drawings be conducted conformably to their requirements. I cannot, within the allowable limits of this report, enter upon a discussion of this question, nor is it necessary that I should do so to vindicate the action of the Department, as my predecessor, in the order which he issued, expressly found as a fact that the scheme which the implicated party conducted was fraudulent. I may, however, remark that State laws cannot change the inherent character of a lottery, nor render that mode of gambling less injurious to the public morals, nor

entitle its aiders and abettors to use the mails as a means of promoting an enterprise which nearly every State in the Union prohibits as criminal, and the moral sense of the nation condemns. The business of gambling may not be illegal in the territory where the law sanctions or tolerates it, but it has all the essential characteristics which elsewhere render the houses in which it is conducted public nuisances, and subject to punishment those who maintain them. Congress declares, in a section of the statutes to which I have referred, that "no letter or circular concerning lotteries shall be carried in the mails." The term "illegal" which preceded "lotteries" in that section as originally framed has been stricken out, and all lotteries, without regard to the asserted lawful character of any of them, are in this respect put upon the same footing. To close the door, however, to all cavil on the subject and to render the form of our legislation entirely consistent on a matter of such vital interest, I recommend that "fraudulent" be stricken from sections 3929 and 4041 of the Revised Statutes.

POSTAL TELEGRAPH.

The subject of telegraphy in connection with our postal system is one of special and increasing interest. It has in all its aspects and relations been so fully discussed in the reports of this Department, as well as in Congress and by the press, as to obviate the necessity of an elaborate presentation of it in this report. I may, however, remark that the impression widely prevails that our means of telegraphic communication should not be limited to such as are furnished by private companies which enjoy a monopoly and claim to be exempt from Government control in their relations with the public. Several substitutes for the present system have been suggested: 1st. The acquisition and operation of the existing lines by the Government. 2d. The construction by the Government of lines which it will operate in competition with existing companies. 3d. The creation of a company by which lines of telegraph are to be supplied to the capital of each State, and other places having a given number of inhabitants, or where stations are now maintained, or the business of the country may hereafter require them. The company, in consideration of the special powers conferred by Congress, is, at certain reduced rates to be prepaid by stamps, to transmit messages at a compensation to be paid by the United States not to exceed ten per centum upon its authorized capital stock over and above operating expenses. The Government is obliged to furnish at each station the requisite accommodations for the officers employed in the transaction of business, and to assume the duty of receiving messages, and delivering by mail or otherwise such as are transmitted.

I merely state in the most general form the leading features of each of these plans. It will be perceived that they are essentially different. The first two contemplate that the Government shall own and operate the lines, including all the necessary apparatus; and the third that a

company shall be employed to perform the required service at a stipulated compensation.

The Constitution confers upon Congress the power to "establish post-offices and post-roads," "to regulate commerce among the several States," and "to make all laws which shall be necessary and proper for carrying into execution" the expressly granted powers.

The question arises whether, under such comprehensive terms, the proposed changes in the postal system are warranted by the Constitution. So far as the clause relating to post-offices and post-roads is concerned, the subject has received careful consideration by committees of the House of Representatives. In speaking of the modes of transmitting intelligence which have been introduced since the adoption of the Constitution, the Committee on Ways and Means, in a report submitted to the House more than forty years ago, makes the following just remarks: "But though not anticipated or foreseen, these new and improved modes were as clearly within the purview of the Constitution as were the older and less perfect ones with which our ancestors were familiar.

* * * * * * * *

"The same principle which justified and demanded the transference of the mail on many chief routes from the horse-drawn coach on common highways to steam-impelled vehicles on land and water, is equally potent to warrent the calling of the electro-magnetic telegraph in aid of the post-office in discharge of its great function of rapidly transmitting correspondence and intelligence."

The Committee on the Judiciary of the House in 1875, in an elaborate report in which the constitutional provision is discussed with marked ability, reached the same conclusion.

Our court of last resort, in Pensacola Telegraph Company *v.* Western Union Telegraph Company, 96 U. S., 1, 9, holds as follows: "The powers thus granted are not confined to the instrumentalities of commerce or the postal service known or in use when the Constitution was adopted, but they keep pace with the progress of the country, and adapt themselves to the new developments of time and circumstances. They extend from the horse with its rider to the stage-coach, from the sailing vessel to the steamboat, from the coach and the steamboat to the railroad, and from the railroad to the telegraph, as these new agencies are successively brought into use to meet the demands of increasing population and wealth. They were intended for the government of the business to which they relate, at all times and under all circumstances. As they were intrusted to the General Government for the good of the nation, it is not only the right, but the duty, of Congress to see to it that intercourse among the States and the transmission of intelligence are not obstructed or unnecessarily encumbered by State legislation."

From the best consideration which I have been enabled to bestow upon the subject, I have reached the conclusion that Congress has the

constitutional power in providing for the postal service of the country to avail itself of all the facilities devised by the inventive genius of modern times for transmitting messages and intelligence, and that it has full authority to adopt either of the first two plans which I have mentioned.

The third section of the act of July 24, 1866, 14 Stat., 22, secured to the United States, at any time after the expiration of five years from that date, the right to purchase at an appraised value "the lines, property, and effects" of any or all the companies which, in the mode prescribed, availed themselves of the benefit and privileges conferred by the act. All the leading companies have accepted the act. Independently, however, of its provisions, the United States Government, by the exercise of its right of eminent domain, has the undoubted authority to appropriate property within the respective States, for its own uses and to enable it to perform its proper functions. "Such an authority," says the Supreme Court, in Kohl *v.* United States, 91 U. S., 367, 371, "is essential to its independent existence and perpetuity." In whatever mode the existing lines be acquired, full compensation for them must be made.

From the earliest period it has been assumed, and in later times judicially determined, that the power of Congress over the postal system extends to the absolute prohibition of the business of carrying letters upon established post-roads or roads parallel thereto. It, therefore, follows that if the telegraph be adopted as a branch of the postal service, all competition therewith may be prohibited.

The commerce clause of the Constitution, so far as it bears upon this question, remains to be considered. It has been determined by the Supreme Court that the telegraph is an instrument of commerce, and as such is subject to the regulating power of Congress. "A telegraph company," says the court in Telegraph Company *v.* Texas, 105 U. S., 460, 464, "occupies the same relation to commerce as a carrier of messages, that a railroad company does as a carrier of goods. Both companies are instruments of commerce, and their business is commerce itself. They do their transportation in different ways, and their liabilities are in some respects different, but they are both indispensable to those engaged to any considerable extent in commercial pursuits." That clause does not, however, authorize the regulation of the business of transmitting messages by telegraph between points wholly within a State.

The establishment and operation of a postal telegraph as a monopoly, or in competition with private companies, would, it is insisted, reduce rates which are now exorbitant and protect the public against the abuses and evils deemed to be inseparable from the service as it exists. In either event an enormous expense must be incurred. But without dwelling upon that consideration, it is clear that an efficient execution of either plan will necessarily involve the employment of a multitude

of operators, messengers, mechanics, and laborers, and thus largely add to the patronage of the Government. An increase of that patronage beyond what is indispensable to the public service is to be deprecated and avoided, and it is one of the dangers which threaten the purity and duration of our institutions. In Europe the telegraph is under the control of the public authorities. With us, the administration is the Government in action, and may, for the time being and for all practical purposes, be considered the Government itself. In seasons of political excitement, and, to some extent at other times, is there not ground for serious apprehension that the telegraph, under the exclusive control of the dominant party, might be abused to promote partisan purposes and perpetuate the power of the administration? But if it could be kept entirely free from such influence, I should hesitate to sanction a measure providing that the United States shall become the proprietor of telegraph lines, and operate them by its officers and agents.

The incorporation of a company with a charter having the essential features to which I have adverted finds in some quarters advocates, and has been heretofore considered by Congress. Its employment for the purpose in question is not subject to some of the objections justly urged against the other plans, and by many is preferred to either of them. A reduction of rates, will, it is believed, be thereby secured. The duty of receiving and delivering telegrams will be discharged by the officers of this Department. That the adoption of this plan would result in a considerable increase of officials and employés is undeniable. Conceding that Congress has authority to incorporate a company and clothe it with the power necessary for the effectual accomplishment of the purpose in view, such a measure will inaugurate a new policy, the adoption of which I do not feel at liberty to recommend.

If Congress can create such a company, it may incorporate railway and other companies, and contract with them for the carriage of the mails; and if this may be done it will not be denied that the Government may build railways and other roads, and construct and equip vessels for postal purposes. The Postmaster-General in 1800 established at the expense of the United States a line of stages for the conveyance of the mails between Baltimore and Philadelphia, and although the contract system now prevails, Congress may unquestionably direct its abandonment and the substitution of its own vehicles in lieu of those furnished by the contractors. Congress by such legislation would thus enter upon a new sphere of action which there is reason to fear would be the first step in a dangerous direction. The patronage of the General Government would be enormously increased, and its jurisdiction extended to matters heretofore confined to State legislation or private enterprise. The injurious tendency of such legislation cannot well be overestimated.

As to telegraphic service wholly within the several States, unless the power to establish post-offices and post-roads be successfully invoked,

the existing rates are beyond governmental control. The opinion has been advanced, that inasmuch as Congress has authority to take charge of the telegraph as a part of the postal system, it may do nothing in that direction and yet prohibit citizens and private companies from engaging in the business, unless they comply with prescribed terms and conditions. It is said that the greater power necessarily includes the less, or, in other words, that the absolute power to prohibit includes the limited power to regulate. This doctrine has evidently no application. It is only by exercising its power in some of the modes already discussed, or in some other appropriate way, that the Government can prescribe terms upon which competition will be permitted, or prohibit it altogether. When a line is neither owned, controlled, or operated by the Government, nor in its behalf, a telegraph company in the transaction of so much of its business as is confined within the limits of a State is beyond the reach of Congress.

I have endeavored to maintain the authority of Congress to assume control of the telegraph because it has been and still is seriously disputed. The existing companies operate their lines solely for the purpose of making money, and while it is doubtless true that their rates, as a whole, are unreasonable, yet in view of what has already been said, I do not think the evils complained of are so grievous as to call for Congressional intervention.

W. Q. GRESHAM,
Postmaster-General.

The PRESIDENT.

I.

Table showing the amount of postal revenue collected by each State and Territory for the year ended June 30, 1883, and the percentage of the same to the total amount collected by all the States and Territories.

State or Territory.	Amount of revenue.	Percentage of total revenue of States and Territories.
Alabama	$351,461 19	.78
Arizona	71,180 08	.15
Arkansas	267,856 79	.59
California	1,241,602 40	2.77
Colorado	473,864 66	1.05
Connecticut	882,662 39	1.96
Dakota	313,169 35	.69
Delaware	103,748 02	.23
District of Columbia	294,563 93	.65
Florida	181,611 11	.40
Georgia	559,140 09	1.24
Idaho	54,736 32	.12
Illinois	3,834,396 22	8.55
Indiana	1,192,992 03	2.66
Indian Territory	27,339 89	.06
Iowa	1,477,336 72	3.29
Kansas	826,652 01	1.84
Kentucky	685,523 61	1.52
Louisiana	447,038 08	.99
Maine	630,515 84	1.40
Maryland	784,264 18	1.75
Massachusetts	2,999,683 16	6.69
Michigan	1,595,770 76	3.56
Minnesota	875,657 46	1.95
Mississippi	283,797 11	.63
Missouri	1,886,378 42	4.28
Montana	121,729 13	.27
Nebraska	500,321 83	1.11
Nevada	81,155 35	.18
New Hampshire	371,084 85	.82
New Jersey	969,186 13	2.14
New Mexico	95,593 24	.21
New York	8,166,559 48	18.21
North Carolina	337,009 74	.75
Ohio	2,900,038 49	6.46
Oregon	202,048 58	.45
Pennsylvania	4,048,738 40	9.03
Rhode Island	332,643 15	.74
South Carolina	279,342 91	.62
Tennessee	546,656 96	1.21
Texas	921,381 90	2.55
Utah	125,805 90	.28
Vermont	339,798 05	.75
Virginia	666,001 97	1.48
Washington	99,114 80	.22
West Virginia	245,139 86	.54
Wisconsin	1,095,144 20	2.44
Wyoming	48,629 35	.107
Alaska	407 80	.0009
Amount collected by States and Territories	44,827,473 89	100.
Receipts of a general nature:		
1. From money-order business	$411,619 37	
2. From dead letters	12,279 83	
3. From fines and penalties	9,752 24	
4. From miscellaneous sources	247,567 28	
	681,218 72	
Total revenues	45,508,692 61	

II.

OFFICE OF THE FIRST ASSISTANT POSTMASTER-GENERAL.

SALARY AND ALLOWANCE DIVISION.

Table showing the gross receipts and expenses for salary of postmaster, clerk-hire, light, fuel, rent, advertising, furniture, stationery, and miscellaneous items, total salary and allowances for expenses, and the percentage of the gross receipts absorbed for expenses at post-offices of the first and second classes for the fiscal year ended June 30, 1883.

[The names of offices of the first class are set in *italics*.]

Office.	State.	Salary of postmaster.	Allowances.								Total salary and allowances.	Gross receipts.	Percentage of gross receipts allowed for expenses.	Percentage of gross receipts allowed for clerk-hire.
			Clerks.	Light.	Fuel.	Rent.	Advertising.	Furniture.	Stationery.	Miscellaneous.				
Adrian	Michigan	$2,800	$1,667	$213	$109	$100	.....	.....	.....	$40	$5,229	$14,946	34.9	11.1
Akron	Ohio	3,000	3,200	138	53	800	.....	.....	$34	.....	7,225	33,701	21.4	9.5
Albany	New York	3,300	36,952	1,566	219	5,000	.....	$10	215	301	47,563	167,255	28.4	22.1
Albion	Michigan	2,200	600	.....	.....	300	.....	.....	.....	.....	3,100	8,016	38.7	7.4
Albion	New York	2,000	700	47	35	180	.....	.....	.....	.....	2,962	7,437	39.8	9.4
Alexandria *	Virginia	2,000	2,791	.....	.....	.....	.....	.....	19	51	4,861	14,773	32.9	18.9
Allegheny	Pennsylvania	2,500	3,706	163	.....	1,275	.....	150	24	7	7,825	37,900	20.6	9.8
Allentown	..... do	2,900	3,000	226	24	600	.....	155	2	24	6,931	22,706	30.5	13.2
Alliance	Ohio	2,100	324	.....	.....	500	.....	.....	.....	.....	2,924	8,674	33.7	3.7
Alpena	Michigan	2,000	400	.....	.....	.....	.....	.....	.....	.....	2,400	7,093	33.8	5.6
Altoona	Pennsylvania	2,800	2,342	121	57	900	.....	25	3	12	6,260	20,177	31.0	11.6
Alton	Illinois	2,100	1,669	80	20	500	.....	.....	.....	.....	4,369	11,063	39.5	15.1
Amesbury	Massachusetts	2,000	500	.....	.....	245	.....	.....	.....	.....	2,745	8,018	34.2	6.2
Amherst	..... do	2,100	893	43	37	270	.....	.....	.....	.....	3,343	8,706	38.4	10.2
Amsterdam	New York	2,400	1,500	76	44	400	.....	.....	.....	.....	4,420	15,229	29.0	9.8
Anderson	Indiana	2,000	480	25	45	150	.....	.....	.....	.....	2,700	6,641	40.7	7.2
Ann Arbor	Michigan	2,900	2,500	135	89	800	.....	381	92	15	6,912	21,920	31.1	11.4
Ansonia	Connecticut	2,400	600	58	.....	525	.....	.....	.....	.....	3,583	10,497	34.1	5.7
Appleton	Wisconsin	2,400	1,500	106	92	600	.....	.....	24	.....	4,722	14,337	32.9	10.5
Ashtabula	Ohio	2,200	450	81	35	500	.....	.....	.....	.....	3,266	8,197	39.8	5.5
Atlanta *	Georgia	3,000	12,534	.....	.....	.....	.....	10	335	65	15,944	102,395	15.5	12.2
Atchison	Kansas	2,900	4,274	185	149	940	.....	50	44	35	8,574	26,878	31.9	15.9
Athens	Georgia	2,000	500	.....	.....	.....	.....	.....	.....	.....	2,500	8,212	36.4	6.1
Atlantic	Iowa	2,200	1,228	.....	.....	450	.....	308	.....	.....	4,186	9,312	44.9	13.2
Atlantic City	New Jersey	2,500	1,740	40	60	200	.....	.....	.....	.....	4,540	14,690	28.5	11.9
Attleborough	Massachusetts	2,100	.....	10	.....	300	.....	.....	.....	.....	2,410	6,544	36.8	.....
Auburn	Maine	2,300	600	.....	.....	600	.....	.....	.....	.....	3,500	10,516	33.3	5.7

Auburn	New York	3,000	4,656	162	76	1,050					8,944	35,637	25.1	13.1
Augusta	Georgia	3,000	5,000	191	27	1,500		70	83	85	9,956	37,831	26.3	13.2
Augusta	Maine	3,000	13,786	253	217	2,500			94	101	19,951	67,930	29.4	20.3
Aurora	Illinois	2,300	1,738	107	50	600					4,804	17,283	27.8	10.1
Austin*	Texas	2,600	7,516						164	47	10,327	45,001	22.9	16.7
*Baltimore**	Maryland	4,000	87,107		4	875	432		1,189	1,244	94,845	540,504	17.5	16.1
*Bangor**	Maine	3,000	5,400						80		8,480	30,192	28.1	17.9
Baraboo	Wisconsin	2,100	450								2,550	5,825	43.8	7.7
Batavia	New York	2,600	1,920	152	93	700				7	5,474	13,674	40.0	14.0
Bath*	Maine	2,300	1,300						12		3,612	11,955	30.2	10.9
Bath	New York	2,100	658	62	50	400			13	5	3,283	9,000	36.5	7.3
Battle Creek	Michigan	2,500	3,000	152	75	900			25		6,652	22,986	29.9	13.4
Bay City	do	2,900	3,000	190	86	1,200		202	37	25	7,770	26,131	29.7	11.5
Beaver Dam	Wisconsin	2,000	200	7	61	250					2,518	5,376	46.8	3.7
Bellefontaine	Ohio	2,000	875	35	47	200					3,157	8,686	36.3	10.1
Belleville	Illinois	2,100	883	84	16	575			4		3,662	10,342	35.4	8.5
Beloit	Kansas	2,000	450								2,450	5,491	44.6	8.2
Beloit	Wisconsin	2,700	800	63	40	650					4,253	12,483	34.0	6.4
Belvidere	Illinois	2,100	346								2,446	5,384	45.4	6.4
Benton Harbor	Michigan	2,100	150								2,250	4,785	47.0	3.1
Bethlehem	Pennsylvania	2,200	1,000	81	23	400				28	3,732	11,690	31.9	8.6
Beverly	Massachusetts	2,100	400	50	25	175					2,750	8,008	34.3	5.0
Biddeford	Maine	2,800	1,400	96		750			7		5,053	11,236	44.9	12.5
Big Rapids	Michigan	2,100	863	49	85	350					3,447	10,907	31.6	7.9
Binghamton	New York	3,000	5,600	240	60	1,000		274	22	142	10,338	44,402	23.2	12.6
Birmingham	Alabama	2,400	950	6	18	{ 200 / 975 }				5	4,554	16,200	28.1	5.9
Birmingham	Connecticut	2,500	1,000	111	32	500					4,143	11,869	34.9	8.4
Black Hawk	Colorado	2,000									2,000	2,402	83.2	
Bloomington	Illinois	3,000	4,593	438	66	1,200			25	35	9,357	37,281	25.0	12.3
Bodie	California	2,700	1,500	43	80	600		12	5	20	4,960	5,017	98.8	29.9
Boise City	Idaho	2,300	1,457	33	73	240					4,103	7,814	52.5	18.6
Boone	Iowa	2,100	600	6	24	150			3		2,883	7,481	38.5	8.0
*Boston**	Massachusetts	4,000	250,688	2,165	599	8,046	449	1,211	8,441	7,553	283,102	1,508,218	18.7	16.6
Boulder	Colorado	2,400	1,200	25	20	300				14	3,959	8,152	48.5	14.7
Bozeman	Montana	2,400	1,003								3,403	8,001	42.5	12.5
Bradford	Pennsylvania	2,600	2,300			800					5,700	30,148	18.8	7.6
Brainerd	Minnesota	2,100	420	50	250	600					3,420	9,450	36.1	4.4
Brattleborough	Vermont	2,400	1,988	35	36	295				10	4,764	14,423	33.0	13.8
Breckenridge	Colorado	2,200	900								3,100	3,279	94.5	27.4
Brenham	Texas	2,200	1,000	1		180			2		3,383	7,437	45.4	13.5
Bridgeport	Connecticut	3,000	6,696	488	88	1,500			93	145	12,010	62,061	19.3	10.8
Brockport	New York	2,000	300								2,300	9,181	25.0	3.3
Brockton	Massachusetts	2,800	2,200	115	36	599					5,750	18,581	30.9	11.9
Brookline	do	2,000				300					2,300	9,960	23.1	
Brooklyn	New York	4,000	50,210	2,105	231	7,333		905	827	2,705	68,316	340,522	20.0	14.7
Brownsville	Texas	2,200	300								2,500	3,920	63.7	7.6
Bryan	do	2,000	300								2,300	4,823	47.6	6.2
Bucyrus	Ohio	2,000	270								2,270	8,094	28.0	3.3
*Buffalo**	New York	3,700	30,500				13		279	297	34,789	326,067	10.6	9.3

* Government building.

Table showing the gross receipts and expenses for salary of postmaster, clerk-hire, light, fuel, rent, advertising, furniture, stationery, &c.—Continued.

Office.	State.	Salary of postmaster.	Allowances.								Total salary and allowances.	Gross receipts.	Percentage of gross receipts allowed for expenses.	Percentage of gross receipts allowed for clerk-hire.
			Clerks.	Light.	Fuel.	Rent.	Advertising.	Furniture.	Stationery.	Miscellaneous.				
Burlington	Iowa	$3,000	$6,060	$480	$178	$929	.....	.....	$339	$32	$10,958	$49,029	22.3	12.2
Burlington*	Vermont	2,500	3,300	.....	.....	.....	.....	$54	71	26	5,951	24,556	24.2	13.4
Butte City	Montana	2,800	2,800	103	180	1,448	.....	.....	18	.....	7,349	18,252	40.2	15.9
Cadillac	Michigan	2,100	200	28	51	200	.....	.....	.....	.....	2,579	8,878	29.0	2.3
Cairo*	Illinois	2,100	3,391	.....	.....	.....	.....	.....	.....	.....	5,491	17,791	38.8	19.0
Calais	Maine	2,100	900	.....	.....	400	.....	.....	.....	.....	3,400	5,087	66.8	17.7
Calumet	Michigan	2,100	200	.....	20	120	.....	.....	.....	.....	2,440	5,556	43.9	3.6
Camden	New Jersey	2,500	2,287	152	84	1,400	.....	.....	45	17	6,485	25,806	25.1	8.9
Canandaigua*	New York	2,200	1,800	.....	.....	.....	.....	.....	.....	.....	4,000	11,074	36.1	10.3
Cañon City	Colorado	2,100	872	.....	.....	.....	.....	.....	.....	.....	2,972	5,539	53.6	15.7
Canton	Illinois	2,200	700	.....	.....	.....	.....	.....	.....	.....	2,900	7,726	37.5	9.1
Canton	Ohio	2,900	2,500	145	.....	700	.....	252	.....	.....	6,497	27,358	23.7	9.1
Carlinville	Illinois	2,000	324	.....	.....	.....	.....	.....	.....	.....	2,324	5,003	46.4	6.5
Carlisle	Pennsylvania	2,100	1,287	.....	.....	.....	.....	.....	.....	3	3,390	11,382	29.8	11.3
Carson City	Nevada	2,500	1,000	44	.....	270	.....	.....	.....	.....	3,814	8,064	47.3	12.4
Carthage	Missouri	2,300	1,450	56	38	200	.....	.....	.....	.....	4,044	11,019	36.7	13.2
Cedar Falls	Iowa	2,200	400	15	90	150	.....	.....	3	3	2,861	7,343	38.9	5.4
Cedar Rapids	....do	3,000	3,074	245	156	810	.....	.....	2	60	7,347	41,485	17.7	7.4
Central City	Colorado	2,700	1,800	31	53	540	.....	.....	.....	11	5,135	6,469	79.3	27.4
Central Falls	Rhode Island	2,000	400	.....	.....	.....	.....	.....	.....	.....	2,400	5,286	45.4	7.6
Chambersburgh	Pennsylvania	2,000	1,200	77	28	250	.....	.....	1	.....	3,556	11,362	31.3	10.6
Charleston	South Carolina	3,000	10,578	.....	.....	.....	.....	.....	169	66	13,813	80,057	17.3	13.2
Charlotte	Michigan	2,000	1,000	25	27	500	.....	.....	.....	.....	3,552	6,997	50.8	14.3
Charlotte	North Carolina	2,400	2,600	74	15	300	.....	26	2	4	5,421	16,688	32.5	15.5
Charlton	Iowa	2,000	500	9	60	260	.....	.....	.....	.....	2,829	6,193	45.6	8.1
Chattanooga	Tennessee	2,500	4,200	263	53	300	.....	78	83	81	7,558	29,309	25.8	14.3
Chester	Pennsylvania	2,200	1,900	83	48	350	.....	.....	.....	.....	4,581	15,953	28.7	11.9
Cheyenne City	Wyoming	2,800	1,700	68	113	540	.....	.....	.....	.....	5,221	15,322	34.1	11.1
Chicago	Illinois	4,000	354,806	1,276	613	6,955	1,164	422	5,508	7,907	382,651	1,949,199	19.6	18.2
Chicopee	Massachusetts	2,100	360	.....	.....	360	.....	.....	.....	.....	2,820	6,185	45.6	5.8
Chillicothe	Missouri	2,000	405	.....	.....	.....	.....	.....	.....	.....	2,405	7,092	35.1	9.3
Chillicothe	Ohio	2,800	1,400	100	49	800	.....	35	34	10	5,228	14,903	33.9	5.7
Chippewa Falls	Wisconsin	2,300	500	71	16	150	.....	.....	.....	.....	3,037	8,328	36.5	6.0
Cincinnati	Ohio	4,000	102,765	.....	9	†720	.....	71	2,072	1,549	111,186	638,624	17.4	16.1
Circleville	....do	2,300	1,000	.....	.....	.....	.....	.....	.....	.....	3,300	7,810	42.3	12.8
Clarksville	Tennessee	2,100	651	44	40	270	.....	.....	14	72	3,101	7,068	41.6	8.5
Cleveland	Ohio	3,800	40,277	11	.....	500	.....	23	325	160	45,116	315,063	14.3	12.7

Clinton	Iowa	2,000	1,500	194	76	800					5,170	16,295	31.9	9.8
Clinton	Massachusetts	2,400	700			200					3,300	8,830	36.9	7.9
Cohoes	New York	2,800	1,350	129	62					2	4,343	12,966	33.4	10.4
Coldwater	Michigan	2,500	1,000	72	142	440					4,154	10,646	39.0	9.4
Colorado Springs	Colorado	2,900	2,300	102	25	1			56	8	5,892	18,162	32.4	15.4
Columbia*	South Carolina	2,300	2,500								4,800	18,641	26.6	13.9
Columbus	Georgia	2,400	3,000	104		1,000			49	60	6,613	20,488	32.3	14.7
Columbus	Mississippi	2,300	405	73	25	75					2,880	6,855	42.0	5.9
Columbus	Ohio	3,300	16,410	540	126	800			90	53	21,319	117,504	18.1	13.9
Colusa	California	2,000	200								2,200	3,796	57.9	5.8
Concord	New Hampshire	2,600	3,524	292		1,425		5	56	26	7,928	28,772	27.5	12.8
Corpus Christi	Texas	2,400	400								2,800	5,314	52.7	7.5
Corning	New York	2,500	900	19	30	450					3,929	11,537	33.9	7.8
Corry	Pennsylvania	2,400	1,200	108	14	350			7		4,079	11,591	35.3	10.4
Corsicana	Texas	2,300	600	23	32					8	2,963	7,916	37.4	7.6
Cortland	New York	2,000	1,000								3,000	12,518	23.9	8.0
Council Bluffs	Iowa	2,900	3,000	109	69	1,000		208	29		7,306	33,454	21.9	9.0
Covington*	Kentucky	2,500	3,084						41	96	5,721	21,787	26.3	14.2
Crawfordsville	Indiana	2,200	1,200	45	23	250					3,718	9,339	38.8	12.2
Creston	Iowa	2,200	1,200	79	66	1					3,546	12,091	29.3	9.9
Cumberland	Maryland	2,400	2,000	40	11	600	9		5	72	5,137	13,011	39.5	15.4
Dallas	Texas	3,000	7,205	280	54			19	99	440	11,097	43,912	25.2	16.4
Danbury	Connecticut	2,800	2,000	124	31	292			12	46	5,305	15,780	33.6	12.7
Danville	Illinois	2,800	2,500	122		400					5,822	15,406	37.8	16.2
Danville	Kentucky	2,000	540								2,540	6,844	38.6	7.9
Danville*	Virginia	2,400	1,800	58	39	330			59	21	4,698	13,210	35.6	13.6
Davenport	Iowa	3,000	5,100	450					27	357	8,943	40,078	22.3	12.7
Dayton	Ohio	3,000	7,800	287	79	2,100		16	149	136	13,567	72,871	18.6	10.7
Deadwood	Dakota	2,700	2,000	80	160	1,200			38	23	6,201	7,068	87.7	28.3
Decatur	Illinois	2,600	3,000	117		400					6,117	29,852	20.5	10.0
Defiance	Ohio	2,000	630	81		325					3,036	8,471	35.8	7.4
Delaware	do	2,700	1,575	109	25	167			32	7	4,606	13,746	33.4	11.5
Denver	Colorado	3,200	20,361	409	135	2,500		76	229	87	26,988	156,290	17.9	18.6
Des Moines*	Iowa	3,000	8,227	17	31	100	15		165	94	11,649	86,774	13.4	9.5
Detroit*	Michigan	3,800	37,912					3	387	226	41,428	314,549	13.2	11.8
Dixon	Illinois	2,100	728	32	47	180					3,157	9,229	34.2	8.6
Dover	New Hampshire	2,800	2,000	108	800			290	24	14	6,036	12,991	46.4	15.4
Dover	New Jersey	2,000	135	15		280					2,430	5,557	47.3	2.4
Dubuque*	Iowa	3,000	5,500					16	57	160	8,733	45,108	19.4	12.2
Duluth	Minnesota	2,400	1,838	28	74	862			2		5,204	16,213	32.1	11.3
Dunkirk	New York	2,200	1,000	50	43	216					3,509	10,373	33.8	9.6
Durango	Colorado	2,600	1,500	53	65				43		4,264	7,469	57.1	20.1
Easthampton	Massachusetts	2,100	300			150					2,550	5,665	45.0	5.3
East Liverpool	Ohio	2,800		18	13	200					2,531	8,630	29.3	
Easton	Pennsylvania	2,500	2,500	199	114	1,025			69	122	6,529	24,876	26.2	10.0
East Saginaw	Michigan	2,900	2,400	272	105	950		194			6,731	31,828	21.1	7.5
Eau Claire	Wisconsin	2,400	2,537	55	150	1,075		305			6,522	18,319	35.6	13.8
Elgin	Illinois	2,800	1,750	68	40	200					4,858	57,446	8.4	3.0
Elizabeth	New Jersey	3,000	8,700	120	57	1,000			21	12	7,910	28,867	27.4	12.8
Elkhart	Indiana	2,600	1,200	70	74	400				24	4,368	13,025	33.5	9.2

* Government building. † Stations.

Table showing the gross receipts and expenses for salary of postmaster, clerk-hire, light, fuel, rent, advertising, furniture, stationery, &c.—Continued.

Office.	State.	Salary of postmaster.	Allowances.								Total salary and allowances.	Gross receipts.	Percentage of gross receipts allowed for expenses.	Percentage of gross receipts allowed for clerk-hire.
			Clerks.	Light.	Fuel.	Rent.	Advertising.	Furniture.	Stationery.	Miscellaneous.				
Elmira	New York	$2,700	$7,100			$2,000			$25	$6	$11,831	$47,194	$25.0	$15.0
El Paso	Texas	2,000	1,000	$60	$40	600					3,700	8,918	41.5	11.2
Elyria	Ohio	2,200	500	42	12	150					2,904	8,966	32.3	5.6
Emporia	Kansas	2,800	1,200	32	24	475					4,531	15,978	28.2	7.5
Erie	Pennsylvania	2,600	6,000	282	121	1			16	138	9,158	41,214	22.2	14.6
Eufaula	Alabama	2,000	1,000			750					3,750	6,785	55.2	14.7
Eureka	Nevada	2,000	1,000	102	100	600					4,402	6,556	67.1	15.3
Evansville	Indiana	3,000	7,180						184	123	10,487	40,386	25.9	7.4
Fall River	Massachusetts	3,000	4,467						11	2	7,480	32,580	22.9	9.1
Faribault	Minnesota	2,000	1,420	50	80	300					3,850	10,273	37.4	19.5
Fargo	Dakota	2,500	2,592	111	143	1,000			120	45	6,511	30,242	21.1	8.6
Fitchburgh	Massachusetts	2,500	2,510	194	48	800				35	6,087	22,930	26.4	10.9
Flint	Michigan	2,700	1,500	114	60	800					5,174	14,930	34.6	10.0
Fond du Lac	Wisconsin	2,500	2,900	250	111	1,000			6		6,767	17,120	39.5	16.9
Fort Dodge	Iowa	2,000	1,000	30	75	225					3,330	9,910	33.6	10.1
Fort Scott	Kansas	2,200	2,200	29	25	600			11		5,065	15,124	33.4	14.6
Fort Smith	Arkansas	2,200	1,000			270				6	3,476	8,470	41.0	11.8
Fort Wayne	Indiana	3,000	5,490	385	163	1,000			18	64	10,120	38,876	26.0	14.1
Fort Worth	Texas	2,800	3,759	115	79				3	17	6,773	26,041	26.0	14.4
Frankfort	Kentucky	2,100	1,500	85	196	350			33	74	4,248	12,174	34.8	12.3
Franklin	Pennsylvania	2,800	1,200	80	43	300			13	14	2,950	10,397	28.3	11.5
Frederick	Maryland	2,500	1,200	44	52	400					4,196	11,477	36.5	10.4
Freeport	Illinois	2,500	2,200	145	79				22	12	4,958	21,071	23.5	10.4
Fremont	Nebraska	2,100	250	16		400				7	2,773	10,464	26.5	2.4
Fremont	Ohio	2,300	750	50	50	500					3,650	11,987	30.6	6.3
Gainesville	Texas	2,100	260	60	30						2,550	8,244	30.5	4.3
Galena	Illinois	2,000	810								2,810	8,353	33.6	9.7
Galesburgh	do	2,900	2,315	252	75	800		$3	56	76	6,477	23,345	27.7	9.9
Gallipolis	Ohio	2,600	800	20	5	67					3,892	8,028	30.0	10.0
Galveston	Texas	3,000	11,279					5	153	188	14,625	84,888	17.2	13.3
Gardiner	Maine	2,100	138			650					2,888	7,209	39.5	18.9
Geneseo	Illinois	2,200	243								2,443	7,006	34.3	3.4
Geneva	New York	2,800	550	105		400			7	15	3,877	18,046	21.5	3.0
Georgetown	Colorado	2,700	1,350	45	72	540				10	4,717	6,814	69.2	19.8
Glens Falls	New York	2,200	1,400	125	75	400				17	4,200	12,316	34.1	11.4
Gloucester	Massachusetts	2,400	2,495						18	3	4,916	16,919	29.0	14.7
Gloversville	New York	2,100	1,000	70		450					3,620	11,374	32.8	8.1

Golden	Colorado	2,200	400	5	34	400			17		3,056	5,010	61.0	7.8
Grand Forks	Dakota	2,000	670								2,670	12,765	20.9	5.2
Grand Haven	Michigan	2,000	600								2,600	6,553	40.7	9.2
*Grand Rapids**	do	3,000	8,337						79	68	11,474	80,350	14.3	10.3
Grass Valley	California	2,700	525	62	35	270			5		3,597	3,737	62.7	9.2
Green Bay	Wisconsin	2,400	1,323	196	54	300					4,275	11,334	37.7	11.6
Greencastle	Indiana	2,100	586			90					2,686	7,473	34.6	7.8
Greenfield	Massachusetts	2,400	900	85	25	450					3,860	13,383	28.0	6.7
Grinnell	Iowa	2,000	122	10	15	80					2,227	8,037	27.7	1.5
Gunnison	Colorado	2,300	1,425								3,725	9,532	39.3	14.9
Hallowell	Maine	2,000		13	12	63					2,088	4,220	49.5	
Hamilton	Ohio	2,000	2,625	127	84	350		242	35	24	6,087	17,445	34.9	15.0
Hancock	Michigan	2,200		12	18	360					2,590	5,891	44.0	
Hannibal	Missouri	2,900	3,000	146	70	533		69			6,718	20,941	32.1	14.3
*Harrisburg**	Pennsylvania	3,000	10,338						200	761	14,299	74,090	19.3	14.0
*Hartford**	Connecticut	3,500	18,856		84				296	193	22,929	137,747	16.6	13.7
Haverhill	Massachusetts	2,900	4,450	122	72	720		361	47	32	8,704	26,907	32.3	16.5
Hazleton	Pennsylvania	2,100	600	24	12	250					2,986	9,183	32.5	6.5
Helena	Arkansas	2,000	600								2,600	6,050	43.0	9.9
Helena	Montana	2,800	3,100	112	136	900		106	60	120	7,352	16,804	43.8	18.5
Henderson	Kentucky	2,100	300			150					2,550	5,890	43.3	5.1
Hillsborough	Ohio	2,000	300	60	25	100					2,485	6,585	37.7	4.6
Hilladale	Michigan	2,200	925	56	38	200					3,419	9,277	36.9	10.0
Hoboken	New Jersey	2,500	898			700					4,098	15,509	26.4	5.8
Holyoke	Massachusetts	2,900	3,100	158	60	600		59	39	11	6,927	30,763	22.5	10.8
Hornellsville	New York	2,100	780	142		500					3,522	14,307	24.6	5.5
Hot Springs	Arkansas	2,100	1,300	48	42	720			40	105	4,355	14,851	29.3	8.7
Houston	Texas	3,000	9,100	388	82	900			68	193	13,731	46,553	29.5	19.5
Hudson	Michigan	2,100	500								2,600	5,017	51.8	9.9
Hudson	New York	2,500	2,000	131	93	400			45	222	5,391	14,664	36.8	13.6
Hyde Park	Massachusetts	2,000									2,000	6,788	29.5	
Independence	Iowa	2,200	500								2,700	7,954	34.0	6.3
*Indianapolis**	Indiana	3,300	29,574					35	614	361	33,884	195,092	17.2	15.2
Ionia	Michigan	2,200	900	28	50	500					3,678	11,005	33.4	8.2
Iowa City	Iowa	2,800	1,800	151	96	1		32	43	200	5,123	15,726	32.6	11.4
Ironton	Ohio	2,100	1,100			300					3,500	9,222	38.0	11.8
Iahpeming	Michigan	2,300	660								2,960	9,651	30.0	6.2
Ithaca	New York	2,700	3,190	279		1,125		38	24	271	7,627	24,009	31.8	13.3
Jackson	Michigan	3,000	3,400	155	93	1,000			23		7,671	29,150	26.3	11.7
Jackson	Mississippi	2,000	1,200	54	26	600		4	9	40	3,933	14,719	26.7	8.0
Jacksonville	Florida	2,900	5,158	193	79	1,200		82	45	76	9,733	32,971	29.5	15.6
Jacksonville	Illinois	2,500	2,350	144	105	380		14	20	15	5,528	21,604	25.6	10.8
Jamestown	New York	2,500	2,325	214		1,200					6,239	22,623	27.6	10.7
Janesville	Wisconsin	2,500	2,000	138	106	1,000			12		5,756	19,415	29.1	10.3
Jefferson	Texas	2,000	500								2,500	5,184	48.2	9.6
Jefferson City	Missouri	2,100	1,162	82	43	270					3,607	11,213	32.2	10.4
Jeffersonville	Indiana	2,100	750	25	20	200			4	1	3,100	8,112	38.1	9.2
Jersey City*	New Jersey	2,800	8,494				$3		147	90	11,543	72,683	15.9	11.7
Johnstown	Pennsylvania	2,800	1,000	47	23	400					4,270	15,157	28.2	6.6
Joliet	Illinois	2,500	3,000	206	63	600		56	60	13	6,498	20,226	32.1	14.8

* Government building.

Table showing the gross receipts and expenses for salary of postmaster, clerk-hire, light, fuel, rent, advertising, furniture, stationery, &c.—Continued.

Office.	State.	Salary of postmaster.	Allowances.								Total salary and allowances.	Gross receipts.	Percentage of gross receipts allowed for expenses.	Percentage of gross receipts allowed for clerk-hire.
			Clerks.	Light.	Fuel.	Rent.	Advertising.	Furniture.	Stationery.	Miscellaneous.				
Junction City	Kansas	$2,000	$343	$10	$60	.....	.....	.....	.....	.....	$2,313	$7,211	32.1	3.4
Kalamazoo	Michigan	2,000	3,400	195	105	$600	.....	$82	$85	$22	7,389	30,177	24.4	11.3
Kansas City	Missouri	3,300	21,898	359	213	3,000	.....	161	325	968	29,899	188,956	15.9	11.6
Keene	New Hampshire	2,700	720	74	45	360	.....	.....	.....	.....	3,899	13,090	29.8	5.5
Kenosha	Wisconsin	2,100	500	11	47	200	.....	.....	.....	1	2,919	7,300	40.0	6.8
Keokuk	Iowa	2,900	3,500	249	78	1,000	.....	67	.....	.....	7,794	27,306	28.5	12.8
Kingston	New York	2,300	1,150	98	12	550	.....	.....	38	18	4,201	10,629	39.5	10.8
Knoxville	Tennessee	2,600	4,134	.....	.....	.....	.....	.....	.....	.....	6,734	37,049	18.2	11.1
La Crosse	Wisconsin	2,500	3,516	119	.....	1,600	.....	.....	20	21	7,776	24,610	31.6	14.3
La Fayette	Indiana	3,000	4,050	132	104	1,500	.....	.....	58	4	8,848	28,510	31.3	14.2
Lake City	Minnesota	2,000	393	.....	.....	300	.....	.....	.....	.....	2,693	6,008	44.8	6.5
Lancaster	Pennsylvania	2,600	3,700	112	9	900	.....	.....	.....	.....	7,321	36,200	20.2	10.2
Lansing	Michigan	2,900	3,328	274	.....	1,000	.....	75	31	58	7,666	30,353	25.3	11.0
La Porte	Indiana	2,000	900	87	19	400	.....	.....	.....	6	3,412	11,713	29.1	7.7
Laramie City	Wyoming	2,200	400	18	59	300	.....	.....	.....	.....	2,977	6,906	43.1	5.7
La Salle	Illinois	2,000	1,530	78	42	262	.....	331	.....	66	5,458	7,609	71.2	19.8
Las Vegas	New Mexico	2,100	635	.....	.....	.....	.....	.....	.....	.....	2,735	11,667	23.5	5.4
Lawrence	Kansas	2,800	3,100	207	184	800	.....	.....	.....	.....	7,091	22,033	32.2	14.1
Lawrence	Massachusetts	3,000	1,000	185	152	1,000	.....	.....	20	20	5,380	30,347	17.7	3.3
Leadville	Colorado	2,700	8,933	375	454	1,733	.....	1	88	100	14,384	35,285	40.8	22.5
Leavenworth	Kansas	3,000	3,843	140	195	975	.....	.....	44	1	8,198	30,260	26.1	12.7
Lebanon	Pennsylvania	2,300	1,000	86	10	500	.....	.....	.....	.....	3,887	12,985	29.9	7.7
Le Mars	Iowa	2,000	450	26	52	50	.....	.....	4	6	2,578	9,913	26.0	4.5
Leominster	Massachusetts	2,100	200	37	7	225	.....	.....	.....	.....	2,569	6,570	39.0	3.0
Le Roy	New York	2,100	400	115	10	150	.....	.....	.....	.....	2,775	6,455	43.0	6.2
Lewisburgh	Pennsylvania	2,000	571	48	15	160	.....	.....	.....	6	2,800	6,689	41.9	8.5
Lewiston	Maine	2,900	2,200	.....	.....	1,500	.....	253	6	11	6,870	21,318	32.2	10.3
Lexington	Kentucky	2,900	3,700	231	92	900	.....	50	1	13	7,887	27,845	28.3	13.0
Lima	Ohio	2,400	1,600	98	60	450	.....	10	16	25	4,650	16,225	28.7	9.2
Lincoln	Illinois	2,200	660	60	50	100	.....	55	.....	3	3,128	9,211	34.0	7.3
Lincoln*	Nebraska	2,600	5,000	.....	.....	.....	.....	.....	500	86	8,186	40,454	20.0	12.4
Little Falls	New York	2,100	1,198	70	54	500	.....	.....	35	41	3,998	13,198	30.3	9.1
*Little Rock**	Arkansas	3,000	7,500	.....	.....	.....	.....	.....	139	29	10,668	40,002	26.7	18.7
Lock Haven	Pennsylvania	2,000	905	137	40	333	.....	.....	32	.....	3,537	11,219	31.5	8.9
Lockport	New York	2,500	3,800	92	49	1,000	.....	.....	.....	43	7,489	26,871	27.2	14.7
Logansport	Indiana	2,800	2,000	177	132	600	$3	.....	31	.....	5,740	14,939	38.4	13.5
Longmont	Colorado	2,100	.....	.....	.....	.....	.....	.....	.....	.....	2,100	4,765	44.1	.....

Los Angeles	California	2,500	4,388	139	7	600			68	71	7,773	36,378	21.4	12.6
*Louisville**	Kentucky	3,500	32,097	1,034	37	1,250		25	583	702	39,228	250,372	15.7	12.8
Lowell	Massachusetts	3,000	5,500	263	88	2,060			12	14	10,973	78,384	14.0	7.1
Ludington	Michigan	2,000		243	18	48	100				2,404	6,818	35.3	3.6
Lynchburgh	Virginia	2,900	4,265	202	165	678			70	52	8,332	37,007	22.5	11.5
Lynn	Massachusetts	2,700	4,000	198	77	1,300			14		8,289	45,279	18.4	8.8
Lyons	New York	2,000		500	22	35	75		295		2,927	6,677	44.0	7.5
Macon	Georgia	3,000	4,691	302	67	900			10	88	43	9,101	29,635	30.7	15.9
Macon City	Missouri	2,000		203	11	10						2,224	5,671	39.2	9.6
Madison	Indiana	2,400	1,120	33	25	200				32	85	3,895	9,467	41.1	11.8
Madison*	Wisconsin	2,600	6,000						2	85	11	8,698	28,038	31.0	21.4
Malden	Massachusetts	2,200		400	32	20	400				2	3,054	10,121	30.2	4.0
Manchester	New Hampshire	2,600	4,000	185	84	1,200			20	18		8,107	34,444	23.5	11.2
Manchester	Iowa	2,000		400	25	50	200					2,675	6,128	43.7	6.5
Manistee	Michigan	2,600	1,015	31	74	315			5			4,040	11,096	36.4	9.1
Mankato	Minnesota	2,200		900			900				3	4,003	10,985	36.4	8.2
Mansfield	Ohio	2,500	2,387	108	61	860						5,856	27,234	21.5	8.7
Marietta	do	2,300	1,150	142	31	375				7		4,005	11,053	36.2	10.4
Marlborough	Massachusetts	2,100		400	25	9	25					2,559	8,021	31.9	5.0
Marquette	Michigan	2,500	1,000	39	56	400				7		4,002	11,284	35.5	8.9
Marshall	do	2,300		800	40	38	360			8		3,541	11,267	31.4	7.1
Marshall	Texas	2,300	1,200	22	12							3,534	9,143	38.7	13.1
Marshalltown	Iowa	2,800	1,400	119	95	600			40	49		5,103	18,889	27.0	7.4
Marysville	California	2,600	1,200	97	48	450						4,395	8,266	53.2	14.5
Massillon	Ohio	2,300	1,200	69	50	300						3,919	10,482	37.6	11.5
Mattoon	Illinois	2,200	1,500	46	45	270						4,070	9,523	42.7	15.7
Meadville	Pennsylvania	2,500	2,700	86	54	1,000			29	10		6,379	16,813	37.9	16.1
Memphis	Tennessee	3,000	13,440	1,018	75	2,200			72	110		19,915	85,361	23.3	15.7
Meriden	Connecticut	2,600	2,246	88		1,380			6	14		6,334	30,491	20.8	7.4
McKeesport	Pennsylvania	2,000		350	49	26	450					2,875	9,480	30.3	3.7
Michigan City	Indiana	2,400		600	48	48	400					3,496	8,819	39.6	6.8
Middletown*	Connecticut	2,500	1,999							74	25	4,598	22,358	20.6	8.9
Middletown	New York	2,100	1,700				1,000					4,800	14,841	32.3	11.5
Milford	Massachusetts	2,100		540								2,640	7,241	36.4	7.5
*Milwaukee**	Wisconsin	3,600	35,505	79	182	660		879	331	608		41,844	260,309	16.1	15.5
Minneapolis	Minnesota	3,100	18,485	1,000		3,600		930	514	677		27,936	167,505	16.6	11.0
Moberly	Missouri	2,200		600	65	18				4		2,887	7,817	36.9	7.7
*Mobile**	Alabama	3,000	10,663						187	200		14,050	54,623	25.7	19.5
Modesto	California	2,000			30	25						2,055	5,079	40.5	
Moline	Illinois	2,500	2,000	104	83	800						5,487	20,233	27.1	9.9
Monmouth	do	2,100	1,600	73	31	248			27	3		4,082	11,395	35.8	14.0
Monroe	Michigan	2,500		353	55	40	200			6	1	3,155	6,200	50.8	5.7
Montgomery	Alabama	2,500	4,500	247	39	638		104	91	68		8,187	28,660	28.5	18.6
Montpelier	Vermont	2,300	1,500	78	62	900		288	58	27		5,213	13,224	39.4	11.3
Morris	Illinois	2,000		425	45	70	150					2,690	6,681	40.2	6.2
Morrison	do	2,100		241								2,341	5,123	45.6	4.7
Morristown	New Jersey	2,400	1,500	48	36	600				1		4,585	14,289	32.0	10.6
Mount Pleasant	Iowa	2,000	1,200	63	65	500		150				3,978	8,604	46.2	13.9
Mount Vernon	New York	2,000		150								2,150	8,000	26.8	1.9
Mount Vernon	Ohio	2,000	1,170	135	50	500						3,855	11,434	33.7	10.2

* Government building.

Table showing the gross receipts and expenses for salary of postmaster, clerk-hire, light, fuel, rent, advertising, furniture, stationery, &c.—Continued.

Office.	State.	Salary of postmaster.	Allowances.								Total salary and allowances.	Gross receipts.	Percentage of gross receipts allowed for expenses.	Percentage of gross receipts allowed for clerk-hire.
			Clerks.	Light.	Fuel.	Rent.	Advertising.	Furniture.	Stationery.	Miscellaneous.				
Muncie	Indiana	$2,100	$450	$25	$40	$200					$2,815	$7,834	35.9	5.7
Muscatine	Iowa	2,400	1,500	69	64	1,000					5,033	16,025	31.4	9.4
Muskegon	Michigan	2,000	1,500	140	68	50					3,758	20,133	13.6	7.5
Nantucket	Massachusetts	2,000									2,000	6,195	32.2	
Napa City	California	2,400	743								3,143	8,291	37.9	9.0
Nashua	New Hampshire	2,800	2,588	148		800			$50	$17	6,412	20,128	31.8	12.8
*Nashville**	Tennessee	3,000	13,566						181	90	16,837	106,931	15.7	12.7
Natchez	Mississippi	2,300	600	34	14	540					3,488	9,930	35.1	6.0
Natick	Massachusetts	2,300	400	24	20	150					2,894	7,224	40.0	5.7
Nebraska City	Nebraska	2,700	1,400	21	64	1			18		4,204	9,475	44.3	14.8
Neenah	Wisconsin	2,100	300	18	34	100					2,552	6,665	38.2	4.5
Negaunee	Michigan	2,000	122			35					2,157	4,818	44.7	2.5
Nevada City	California	2,600	500	87	43	180				4	3,414	5,882	58.3	8.5
New Albany	Indiana	2,400	2,075	117	54	588			32	78	5,344	12,958	41.2	16.0
*Newark**	New Jersey	3,100	16,000						85	72	19,257	139,825	13.7	11.4
Newark	Ohio	2,400	1,450	113	20	460					4,393	14,042	31.3	10.0
New Bedford*	Massachusetts	2,600	3,600						34	12	6,246	39,980	15.6	9.0
New Britain	Connecticut	2,800	2,400	106	50	800			21		6,177	20,461	30.2	11.7
New Brunswick	New Jersey	2,600	2,200	175	40	800			7	8	5,830	18,754	31.1	11.7
Newburgh	New York	2,900	5,400	193	180	1,215			25	25	9,938	26,682	37.3	20.2
Newburyport	Massachusetts	2,400	1,700	97	58	900			22	15	5,192	16,263	31.9	10.5
New Castle	Pennsylvania	2,200	2,500	50	21	600			12		5,384	12,798	42.1	19.5
*New Haven**	Connecticut	3,100	16,175						178	253	19,706	123,671	15.9	13.1
New London	do	2,500	3,114	264		1,500			42	172	7,592	20,849	36.4	14.9
*New Orleans**	Louisiana	3,700	55,012				$2		986	1,003	60,702	292,490	20.7	18.8
Newport	Kentucky	2,300	1,500	45	45	144		$11	52	182	4,297	8,399	51.2	17.9
Newport*	Rhode Island	2,600	4,063					48	92	19	6,822	30,506	22.4	13.3
Newton	Iowa	2,100	300								2,400	6,364	37.7	4.7
*New York**	New York	8,000	802,935	8,017	724	18,904	5,985	694	9,715	12,645	867,619	4,413,822	19.7	18.2
Niles	Michigan	2,100	600	69	49	242					3,060	7,325	41.8	8.2
*Norfolk**	Virginia	3,000	6,750						34	63	9,847	47,842	20.6	14.1
Norristown	Pennsylvania	2,000	1,195	82	30	650					3,957	12,167	31.0	9.4
North Adams	Massachusetts	2,800	1,464	81	64	350				6	4,765	15,938	29.8	9.2
Northampton	do	2,300	1,500	94	59	600					4,553	17,865	25.5	8.4
North Attleborough	do	2,400	300			300					3,000	7,234	41.5	4.1
Northfield	Minnesota	2,000	335	5	20	100					2,460	6,557	37.5	5.1
North Platte	Nebraska	2,000				350					2,350	4,022	58.4	

Norwalk	Connecticut	2,100	700	68		400					3,268	9,056	36.1	7.7
Norwalk	Ohio	2,400	900	98	39	528			6		3,971	11,366	34.9	7.9
Norwich	Connecticut	2,900	3,500	277	90	1,200			12	29	8,008	27,674	29.3	12.6
Norwich	New York	2,100	540								2,640	8,555	30.9	6.3
Oakland	California	3,000	8,000	41	89	856				48	12,036	35,947	33.5	22.3
Oberlin	Ohio	2,100	861	29	37	300					3,327	10,027	33.2	8.6
Ogden City	Utah	2,100	2,700			000				17	5,417	14,659	36.9	18.4
Oil City	Pennsylvania	2,800	2,000	88	45	850			29	15	5,827	15,102	38.6	13.2
Olathe	Kansas	2,100	400	20	25						2,545	5,359	47.5	7.0
Olean	New York	2,400	1,600	108	24	300		274	13	6	4,725	12,949	36.5	12.4
*Omaha**	Nebraska	3,000	16,407						423	105	19,935	100,816	19.8	16.3
Oneida	New York	2,200	788	65	45	370			28		3,491	11,232	31.1	7.9
Oneonta	do	2,000	500			375					2,875	7,843	36.7	6.4
Orange	New Jersey	2,800	1,200	32	37	270				1	4,340	12,571	34.5	9.5
Oshkosh	Wisconsin	3,000	3,600	267	83	1,200		280	20		8,450	22,436	37.7	16.0
Oskaloosa	Iowa	2,200	1,500		66	222					3,988	14,086	28.5	10.6
Oswego*	New York	2,500	4,344						31	32	6,907	25,837	26.7	16.8
Ottawa	Illinois	2,400	1,800	111	48	300			24	26	4,709	14,491	32.5	12.4
Ottawa	Kansas	2,100	500			300					2,900	9,082	31.9	5.5
Ottumwa	Iowa	2,400	2,500	158	38	1,000			8		6,099	21,574	28.3	11.6
Owatonna	Minnesota	2,000	500								2,500	5,949	42.0	8.4
Owego	New York	2,400	1,000	100	45	500				32	4,077	10,273	39.7	9.7
Owensborough	Kentucky	2,100	700	238							3,038	9,323	32.6	7.5
Paducah	do	2,500	1,155	135	31	270					4,091	12,149	33.7	9.5
Painesville	Ohio	2,400	955	67		200			9		3,631	12,383	29.3	7.7
Palestine	Texas	2,100	1,000	30	40	248		54			3,472	15,063	23.0	6.6
Paris	Kentucky	2,000	600	32	17	225					2,874	7,210	39.9	8.3
Paris	Illinois	2,200	785	53	25						3,063	8,298	36.9	9.5
Parkersburgh*	West Virginia	2,000	2,600						4		4,604	12,855	35.8	20.2
Parsons	Kansas	2,400	1,068	28	36	180					3,712	9,389	39.5	11.4
Paterson	New Jersey	2,800	3,200	147		800			50	17	6,814	35,054	19.4	9.1
Pawtucket	Rhode Island	2,500	3,000	164		1,005	6	72	63	53	6,863	21,300	32.2	14.1
Peabody	Massachusetts	2,000	124	12	11	108		28			2,283	5,508	41.4	2.2
Pekin	Illinois	2,000	1,150	100	31	1					3,282	8,044	40.8	14.3
Penn Yan	New York	2,400	700	54	30	270			7		3,461	8,338	41.5	8.4
Pensacola	Florida	2,100	744	16	9	900		40	19	49	3,877	11,172	34.7	6.7
Peoria	Illinois	3,000	6,504	281	67	1,688		311	238	153	12,242	71,395	17.1	9.1
Peru	Indiana	2,200	575	61	80	500				6	3,422	8,451	40.5	6.8
Petaluma	California	2,100	540								2,640	7,468	35.4	7.2
*Petersburgh**	Virginia	3,000	3,133						37	5	6,175	20,788	29.7	15.1
*Philadelphia**	Pennsylvania	4,000	240,188	1,249	368	4,990	789	123	3,435	8,141	263,283	1,579,235	16.6	15.2
Pine Bluff	Arkansas	2,100									2,100	6,607	37.8	
Piqua	Ohio	2,600	855	45	26	500				5	3,731	10,143	36.7	5.5
*Pittsburgh**	Pennsylvania	3,900	54,721						702	658	60,031	344,891	17.4	15.6
Pittsfield	Massachusetts	2,800	2,468	112	117	1,000		91	154	195	6,937	27,288	25.4	2.9
Pittston	Pennsylvania	2,600	500	96	20	300					3,516	10,436	33.6	4.8
Plainfield	New Jersey	2,800	1,200	75	50	750		281	14		5,170	16,096	32.1	7.5
Plattsmouth	Nebraska	2,000	450			225					2,675	6,212	43.0	7.2
Plymouth	Massachusetts	2,100	600	12		200				2	2,914	8,663	33.6	6.9
Pontiac	Michigan	2,200	500	30	60	350				2	3,151	8,300	37.9	6.0

* Government building.

Table showing the gross receipts and expenses for salary of postmaster, clerk-hire, light, fuel, rent, advertising, furniture, stationery, &c.—Continued.

Office.	State.	Salary of postmaster.	Allowances.								Total salary and allowances.	Gross receipts.	Percentage of gross receipts allowed for expenses.	Percentage of gross receipts allowed for clerk-hire.
			Clerks.	Light.	Fuel.	Rent.	Advertising.	Furniture.	Stationery.	Miscellaneous.				
Portage	Wisconsin	$2,100	$397	.....	.....	$400	.....	.....	.....	$5	$2,902	$5,891	49.2	6.7
Port Huron*	Michigan	2,000	1,550	.....	.....	.....	.....	.....	.....	.....	3,550	14,444	24.5	10.8
*Portland**	Maine	3,000	18,690	.....	.....	.....	.....	.....	$300	3	21,993	100,151	21.9	18.7
*Portland**	Oregon	3,000	8,900	.....	.....	.....	.....	.....	148	99	12,147	68,815	17.6	12.9
Portsmouth*	New Hampshire	2,400	2,900	.....	.....	.....	.....	.....	14	48	5,362	14,545	36.8	19.9
Portsmouth	Ohio	2,600	1,300	$22	$28	300	.....	.....	21	44	4,315	14,805	29.1	8.8
Portsmouth	Virginia	2,000	782	25	20	600	.....	.....	.....	.....	3,427	9,390	36.4	8.3
Pottsville	Pennsylvania	2,500	2,100	131	12	500	.....	.....	.....	.....	5,243	15,600	33.6	13.5
Poughkeepsie	New York	3,000	5,100	297	105	1,350	.....	.....	47	79	9,978	40,317	24.7	12.6
Prescott	Arizona	2,100	800	.....	.....	.....	.....	.....	.....	.....	2,900	7,198	40.2	11.1
Princeton	Illinois	2,000	800	24	.....	120	.....	.....	.....	.....	2,944	8,756	33.6	9.1
Princeton	New Jersey	2,100	1,200	.....	.....	.....	.....	.....	.....	25	3,325	8,567	39.9	14.0
*Providence**	Rhode Island	3,400	23,940	.....	.....	.....	.....	.....	.....	.....	27,340	190,143	14.3	12.6
Pueblo	Colorado	2,800	2,800	147	37	900	.....	.....	7	31	6,722	16,859	33.3	16.6
Quincy	Illinois	3,000	5,500	236	91	1,800	.....	$10	43	120	10,800	44,312	24.3	12.4
Quincy	Massachusetts	2,000	500	25	53	125	.....	.....	.....	.....	2,703	7,012	38.5	7.1
Racine	Wisconsin	2,600	3,377	175	144	1,200	.....	.....	95	14	7,605	31,416	24.2	10.7
Rahway	New Jersey	2,000	800	95	30	240	.....	.....	.....	.....	3,165	11,012	28.7	7.3
Raleigh*	North Carolina	2,500	4,000	.....	.....	.....	.....	.....	44	7	6,551	24,015	27.2	16.6
Reading	Pennsylvania	2,700	5,982	175	21	1,100	.....	.....	25	1	10,004	42,072	23.7	14.2
Red Bluff	California	2,200	.....	120	30	350	.....	.....	.....	.....	2,700	6,204	43.5	.....
Red Oak	Iowa	2,000	1,200	57	96	600	.....	.....	.....	.....	3,953	9,244	42.7	12.9
Red Wing	Minnesota	2,400	1,000	.....	.....	900	.....	.....	.....	5	4,305	13,019	33.0	7.7
Reno	Nevada	2,300	700	.....	.....	.....	.....	.....	.....	.....	3,000	7,097	42.2	9.9
Richmond	Indiana	2,500	3,318	150	94	800	.....	.....	86	155	7,103	28,365	24.3	11.7
*Richmond**	Virginia	3,000	18,300	.....	.....	.....	.....	.....	225	313	21,838	117,397	18.6	15.6
Ripan	Wisconsin	2,000	405	34	80	160	.....	.....	.....	.....	2,679	6,058	44.2	6.7
Rochester	Minnesota	2,100	450	.....	.....	900	.....	.....	.....	.....	3,450	11,221	30.7	4.0
Rochester	New York	3,400	19,627	1,200	.....	3,000	.....	21	473	738	28,459	249,333	11.4	7.9
Rockport	Illinois	2,600	3,000	142	99	1,200	.....	66	.....	6	7,113	37,828	18.8	7.9
Rock Island	do	2,500	4,200	382	191	1,246	.....	388	.....	551	9,458	18,598	50.8	22.5
Rockland*	Maine	2,100	1,000	.....	.....	.....	.....	.....	.....	.....	3,100	9,595	32.3	10.4
Rome	Georgia	2,200	1,310	76	23	700	.....	.....	13	3	4,325	12,177	35.5	10.8
Rome	New York	2,400	2,200	130	67	500	.....	.....	.....	.....	5,311	19,510	27.1	11.3
Rondout	do	2,300	1,000	80	24	350	.....	.....	.....	.....	3,754	11,589	32.3	8.6
Rutland*	Vermont	2,100	3,500	.....	.....	.....	.....	.....	96	3	5,699	20,243	28.1	17.3
Saco	Maine	2,300	600	.....	.....	.....	.....	.....	.....	.....	2,900	5,478	52.9	10.9

Sacramento	California	3,000	9,910	181	149	2,000			65	31	15,336	47,096	32.5	21.0
Saginaw	Michigan	2,800	1,000	124	28	225				22	4,199	11,818	35.5	8.5
Saint Albans	Vermont	2,100	1,300	94	54	720			3	2	4,273	10,208	41.8	12.7
Saint Johnsbury	do	2,100	200			500				3	3,503	10,623	32.9	6.7
Saint Joseph	Missouri	3,000	9,000	439	109	800		19	90	120	13,577	71,658	18.9	12.6
*Saint Louis**	do	4,000	141,632	459	50	793	341	87	1,490	2,032	150,684	843,730	17.9	16.8
*Saint Paul**	Minnesota	3,200	20,253						258	273	24,084	183,955	13.0	11.9
Salem	Massachusetts	2,500	3,500	188		2,000		5	57	12	8,262	26,304	31.4	13.3
Salem	Oregon	2,500	900	82	40	360					3,882	9,127	42.5	9.8
Salt Lake City	Utah	3,000	7,200	379	58	1,500		286	89	124	13,336	40,878	32.6	19.3
San Antonio	Texas	3,000	6,150	378	57	1,000		240	159	193	11,177	36,974	30.2	16.6
San Diego	California	2,100	670			480					2,250	7,154	31.4	9.4
Sandusky*	Ohio	2,500	3,400				25		44	24	6,093	20,408	34.8	16.7
*San Francisco**	California	4,000	91,173	198	42	2,160			1,537	1,523	100,472	558,134	18.0	16.3
San José	do	2,500	3,933	262	48				57	12	6,812	29,232	23.3	13.5
Santa Barbara	do	2,300	500	50	25	150			12		3,017	7,827	38.7	6.3
Santa Cruz	do	2,200									2,290	7,416	29.7	
Santa Fé	New Mexico	2,200	1,800	89	15	1,650			38		5,182	9,440	55.0	19.1
Santa Rosa	California	2,200	590								2,700	7,567	36.0	6.7
Saratoga Springs	New York	2,500	3,300	146	66	1,500		42	85	81	7,720	28,024	27.6	11.8
Savannah	Georgia	3,000	9,400	345	81	2,500			144	214	15,884	71,574	22.2	13.4
Schenectady	New York	2,800	1,900	81	64	500			5		5,350	17,571	30.4	10.8
Scranton	Pennsylvania	2,900	5,175	158	22	560			55	20	8,899	31,694	28.1	16.3
Seattle	Washington	2,100									2,100	12,152	17.2	
Sedalia	Missouri	2,800	2,234	85	25	400			16		6,270	21,049	29.8	13.9
Selma	Alabama	2,500	2,700	122	21	900			9	20	6,282	20,503	31.1	13.2
Seneca Falls	New York	2,100	800	126	83	600	3		46	3	3,761	13,691	27.5	5.8
Seymour	Indiana	2,000	152								2,162	5,690	38.0	2.8
Sharon	Pennsylvania	2,200	400	96	26	180					2,872	8,254	34.8	4.8
Sheboygan	Wisconsin	2,100	200	25	38	400			1		2,764	8,303	34.0	2.4
Shelbyville	Illinois	2,000			41	160			26	25	2,192	5,123	42.8	
Sherman	Texas	2,000	1,700	88	37	200			18		4,043	12,990	31.1	13.1
Shreveport	Louisiana	2,600	1,200	13	5	200			14	1	4,133	11,394	36.3	10.5
Sidney	Ohio	2,400	900			250					3,150	7,833	40.2	11.5
Silver Cliff	Colorado	2,400	1,000							7	3,407	3,879	87.8	25.8
Sioux City	Iowa	2,900	3,280	174	137	1			25	16	6,533	27,500	23.8	11.9
Sioux Falls	Dakota	2,100	750	19	106	400					3,375	9,320	36.2	8.0
South Bend	Indiana	2,600	2,750	186	150	800		190	38	187	6,901	22,764	30.3	12.8
South Norwalk	Connecticut	2,300	784	53	31	150					3,318	8,613	38.5	9.1
South Pueblo	Colorado	2,100	1,050	42	60	250					3,502	12,292	28.5	8.6
Spartanburgh	South Carolina	2,000	444	30	20	300					2,794	7,251	38.5	6.1
Spencer	Massachusetts	2,000	300	15	35	50					2,400	5,924	40.5	5.1
*Springfield**	Illinois	3,000	5,948							56	48	9,052	37,207	24.3
Springfield	Missouri	2,600	1,840	73	27						4,540	14,492	31.3	12.7
Springfield	Massachusetts	3,000	7,352	529		2,300		10	37	93	13,321	78,624	16.9	9.3
Springfield	Ohio	3,000	6,000	144	45	1,400			25	33	10,647	56,310	18.9	10.7
Stamford	Connecticut	2,300	1,300	107	21	262				6	3,996	16,171	24.7	8.0
Staunton	Virginia	2,000	2,100	93	97	350		1	19	64	4,724	15,235	31.0	13.8
Sterling	Illinois	2,200	1,062	69	56	406					3,787	12,039	31.5	8.8
Steubenville	Ohio	2,300	1,000	45	9	731					4,085	15,401	26.5	6.5

* Government building.

Table showing the gross receipts and expenses for salary of postmaster, clerk-hire, light, fuel, rent, advertising, furniture, stationery, &c.—Continued.

Office.	States.	Salary of postmaster.	Allowances.								Total salary and allowances.	Gross receipts.	Percentage of gross receipts allowed for expenses.	Percentage of gross receipts allowed for clerk-hire.
			Clerks.	Light.	Fuel.	Rent.	Advertising.	Furniture.	Stationery.	Miscellaneous.				
Stillwater	Minnesota	$2,400	$1,550	$174	$91	$900	.....	.....	.....	.....	$5,115	$16,839	30.4	9.3
Stockton	California	2,500	2,500	164	40	.....	.....	.....	.....	.....	5,204	19,561	26.6	12.8
Streator	Illinois	2,600	1,000	71	22	.....	.....	.....	.....	.....	3,693	8,731	42.3	11.5
Sycamore	do	2,100	.....	.....	.....	.....	.....	.....	.....	.....	2,100	7,059	29.6	.....
Syracuse	New York	3,000	14,500	386	.....	3,000	.....	$6	$177	$193	21,262	126,763	16.8	11.4
Taunton	Massachusetts	2,900	2,633	134	36	1,500	.....	40	14	.....	7,257	25,270	28.7	10.4
Terre Haute	Indiana	3,000	6,100	458	87	900	$30	28	20	212	10,835	37,145	29.2	11.0
Texarkana	Arkansas	2,200	1,100	.....	.....	.....	.....	.....	.....	.....	3,300	8,095	40.7	13.6
The Dalles	Oregon	2,000	600	13	22	50	.....	.....	.....	.....	2,685	5,812	46.3	10.3
Tiffin	Ohio	2,200	1,150	52	55	400	.....	.....	.....	.....	3,857	11,195	34.5	10.3
Titusville	Pennsylvania	2,500	2,100	103	38	850	.....	.....	.....	.....	5,591	16,157	34.6	12.9
Toledo	Ohio	3,100	17,092	1,318	.....	3,350	50	155	220	645	25,930	129,298	20.1	13.2
Tombstone	Arizona	2,800	1,800	25	.....	600	.....	26	64	45	5,315	9,528	55.8	18.9
Topeka	Kansas	2,700	6,316	400	200	750	.....	.....	183	79	10,628	57,488	18.5	10.9
Torrington	Connecticut	2,000	.....	.....	.....	.....	.....	.....	.....	.....	2,000	6,006	33.3	.....
Traverse City	Michigan	2,000	.....	.....	.....	.....	.....	.....	.....	.....	2,000	6,533	30.6	.....
Trenton*	New Jersey	2,700	6,380	.....	.....	.....	.....	.....	70	3	9,153	56,308	16.3	11.3
Trinidad	Colorado	2,200	.....	.....	.....	.....	.....	.....	.....	.....	2,200	7,422	29.6	.....
Troy	New York	3,000	13,641	600	6	2,875	.....	506	184	749	21,561	100,582	21.4	13.6
Troy	Ohio	2,200	700	50	55	300	.....	.....	.....	.....	3,305	9,673	34.2	7.2
Tucson	Arizona	2,400	1,500	30	.....	500	.....	12	28	.....	4,470	14,232	31.4	10.5
Tyler	Texas	2,000	.....	.....	.....	.....	.....	.....	.....	.....	2,000	6,435	31.1	.....
Tyrone	Pennsylvania	2,000	550	27	6	200	.....	.....	3	12	2,798	7,024	39.8	7.8
Urbana	Ohio	2,300	1,400	70	55	.....	.....	.....	.....	.....	3,825	11,248	34.0	12.4
*Utica**	New York	3,000	7,515	1	.....	.....	1	.....	114	65	10,696	69,940	15.3	10.7
Vallejo	California	2,300	.....	.....	.....	.....	.....	.....	.....	.....	2,300	6,624	34.7	.....
Valparaiso	Indiana	2,500	.....	.....	.....	.....	.....	.....	.....	.....	2,500	11,063	22.6	.....
Vicksburgh	Mississippi	2,500	3,000	185	51	1,000	.....	27	42	24	6,829	20,247	31.0	14.8
Vincennes	Indiana	2,600	1,200	54	25	.....	.....	.....	9	.....	3,888	11,302	34.3	10.6
Vinton	Iowa	2,000	.....	.....	.....	.....	.....	.....	.....	.....	2,000	5,509	36.3	.....
Virginia City	Nevada	2,800	3,600	127	159	1,150	.....	.....	58	.....	7,894	10,644	74.2	33.8
Wabash	Indiana	2,000	.....	.....	.....	.....	.....	.....	.....	.....	2,000	6,830	29.3	.....
Waco	Texas	2,800	2,000	180	51	400	.....	.....	19	5	5,455	19,751	27.6	10.1
Wakefield	Massachusetts	2,000	180	.....	.....	200	.....	.....	.....	.....	2,380	6,568	34.7	2.7
Waltham	do	2,800	1,184	101	26	425	.....	.....	.....	.....	4,536	14,410	31.5	8.2
Walla Walla	Washington	2,800	1,200	.....	.....	480	.....	.....	.....	.....	4,480	12,099	37.0	9.9
Warren	Ohio	2,300	700	95	72	500	.....	.....	.....	.....	3,667	10,654	34.4	6.6

Warren	Pennsylvania	2,700	1,300	90	40	405			6		4,541	14,502	31.3	9.2
Washington	District of Columbia	4,000	119,568	5,162	946	4,863	119	450	1,611	2,337	139,056	292,332	47.6	40.9
Washington	Iowa	2,000									2,000	6,279	31.9	
Washington C. H	Ohio	2,300									2,300	8,106	28.4	
Waterbury	Connecticut	2,600	4,300	266		1,700	12	700	34	30	9,642	31,544	35.7	13.6
Waterloo	Iowa	2,200	2,000	70	115	300		28	24		4,737	13,828	34.3	14.5
Waterloo	New York	2,100	200	56	11	200			25		2,592	6,591	39.3	3.0
Watertown	do	2,500	3,304	227	134	729		102	376	63	7,435	24,658	30.2	13.4
Watertown	Wisconsin	2,200	1,198	61	74	500			3		4,036	8,582	45.9	14.0
Waterville	Maine	2,000									2,000	8,471	23.6	
Waukegan	Illinois	2,100	350	34	31	300			7		2,822	6,515	43.3	5.4
Waukesha	Wisconsin	2,200	500	29	55	400					3,184	7,536	43.6	6.6
Waverly	New York	2,000	243			400					2,643	8,106	32.6	3.0
Weatherford	Texas	2,000									2,000	5,839	34.3	
West Bay City	Michigan	2,000									2,000	5,017	39.9	
Westborough	Massachusetts	2,100	600			300			13		3,013	6,635	45.4	9.3
Westerly	Rhode Island	2,600	750	57		500					3,907	9,028	43.3	8.3
Westfield	Massachusetts	2,800	1,000	212	103	500					4,615	16,157	28.6	6.2
Wheeling*	West Virginia	2,700	9,000						27	55	11,882	45,447	26.1	19.8
Whitewater	Wisconsin	2,000	400								2,400	7,590	31.6	5.3
Wichita	Kansas	2,800	1,700	129	179	150			7		4,965	14,270	34.9	11.9
Wilkesbarre	Pennsylvania	2,900	3,000	113	88	600		107		5	6,813	27,499	24.8	10.8
Williamsport	do	2,900	3,015	176	52	800		150	29	10	7,132	31,992	22.3	9.4
Wilmington*	Delaware	2,700	7,122						100	49	9,971	50,177	19.9	14.2
Wilmington	North Carolina	2,400	4,118	237	61	2,400			22	17	9,255	26,012	35.6	15.8
Winfield	Kansas	2,000	1,000								3,000	8,578	35.0	11.7
Winona	Minnesota	2,500	2,400	125	132	1,550			23	15	6,745	19,505	34.6	12.3
Woburn	Massachusetts	2,300	279			350					2,929	6,275	46.7	
Woonsocket	Rhode Island	2,800	650	67	24	405					3,946	12,240	32.2	5.3
Wooster	Ohio	2,300	1,100	104	25	400			9		3,938	11,296	34.9	9.7
Worcester	Massachusetts	3,000	10,149	550	136	1,750		156	253	328	16,322	96,746	16.9	10.5
Wyandotte	Kansas	2,500	540	40	50	240		50		4	3,420	10,243	33.4	5.3
Xenia	Ohio	2,100	1,300	73	36	350		88	11		3,958	12,740	31.1	10.2
Yankton	Dakota	2,200	1,680	62	98	200			26	95	4,361	7,373	59.1	17.6
Yonkers	New York	2,800	1,980	85	36	600					5,501	22,152	24.8	8.9
York	Pennsylvania	2,700	2,500	108	43	537		18	30	91	6,027	25,509	23.6	9.8
Youngstown	Ohio	2,500	2,200	138	45	675		43	14	29	5,642	24,278	23.2	9.0
Ypsilanti	Michigan	2,300	828	45	99	250				2	3,524	9,016	39.8	9.2
Zanesville	Ohio	2,500	2,905	163	25	800		3	28		6,514	26,322	24.7	11.4

* Government building.

RECAPITULATION.

Total number of first and second class post-offices	587
Grand total of salaries and allowances for expenses	$6,049,191
Grand total of gross receipts for fiscal year ended June 30, 1883	$27,310,657

Table showing salaries paid to the principal clerks in the offices at New York, Chicago, Philadelphia, Boston, Saint Louis, Cincinnati, San Francisco, and Baltimore, out of postal funds.

Office.	State.	Number of clerks in office paid from postal funds.	Number of clerks with salaries from $2,000 to $4,000 per annum.	Number of clerks with salaries from $1,500 to $2,000 per annum.	Number of clerks with salaries from $1,200 to $1,500 per annum.
New York	New York	886	14	40	134
Chicago	Illinois	401	11	15	35
Philadelphia	Pennsylvania	356	8	12	16
Boston	Massachusetts	295	7	10	20
Saint Louis	Missouri	184	6	4	14
Cincinnati	Ohio	117	3	5	3
San Francisco	California	77	3	8	36
Baltimore	Maryland	95	3	5	7

The above table does not include allowances for money-order business. The following will show the allowances for clerk-hire out of money-order funds at five of the principal offices:

Office.	State.	Number of clerks in office (money-order department).	Number of clerks with salaries from $2,000 to $4,000 per annum.	Number of clerks with salaries from $1,500 to $2,000 per annum.	Number of clerks with salaries from $1,200 to $1,500 per annum.
New York	New York	54	3	5	20
Chicago	Illinois	24	2	1	6
Philadelphia	Pennsylvania	10	1	2	1
Boston	Massachusetts	12	1	2	1
Saint Louis	Missouri	12	1	1	2

III.

Statement showing the number of Presidential post-offices in the several States and Territories and the aggregate salaries of the postmasters thereat, as adjusted to take effect October 1, 1883; the total gross and net receipts at said offices during the fiscal year ended June 30, 1883; together with the population, June 1, 1880, as per Compendium of the Tenth Census.

No.	State.	Number of Presidential post-offices, adjustment of October 1, 1881.	Aggregate salaries of postmasters.	Aggregate receipts, fiscal year ended June 30, 1883.	Net receipts.	Population, Census 1880.	
						Rank of State or Territory.	Population.
1	Alabama	22	$36,500	$185,552 49	$115,166 53	17	1,262,505
2	Arizona	5	9,300	37,793 01	22,908 01	44	40,440
3	Arkansas	15	25,400	113,859 85	66,707 50	25	802,525
4	California	56	96,800	954,444 76	634,279 09	24	864,694
5	Colorado	32	55,300	359,420 91	228,282 59	35	194,327
6	Connecticut	53	95,300	698,567 04	469,641 41	28	622,700
7	Dakota	33	49,900	170,423 08	103,415 08	40	135,177
8	Delaware	7	11,600	69,772 91	41,202 64	38	146,608
9	District of Columbia	1	5,000	292,332 00	91,386 53	36	177,624
10	Florida	13	21,500	88,097 35	53,653 43	34	269,493
11	Georgia	28	48,500	356,105 61	230,528 50	13	1,542,180
12	Idaho	4	5,500	15,546 17	7,393 17	46	32,610
13	Illinois	180	300,600	3,198,530 80	2,152,607 20	4	3,077,871
14	Indiana	90	150,500	671,386 07	358,526 50	6	1,978,301
15	Iowa	122	204,900	923,770 27	588,333 27	10	1,624,615
16	Kansas	81	128,600	494,857 88	301,751 07	20	996,096
17	Kentucky	35	58,800	458,207 21	298,932 62	8	1,648,690
18	Louisiana	14	21,500	341,041 59	207,903 92	22	939,946
19	Maine	32	56,100	359,799 33	225,816 81	27	648,936
20	Maryland	19	33,200	629,539 45	402,769 10	23	934,943
21	Massachusetts	118	212,800	2,643,198 74	1,736,275 50	7	1,783,085
22	Michigan	107	183,500	1,111,063 88	755,635 47	9	1,636,937
23	Minnesota	50	42,000	619,739 60	461,522 15	26	780,773
24	Mississippi	24	37,200	124,663 84	74,539 84	18	1,131,597
25	Missouri	68	113,700	1,432,742 26	948,823 72	5	2,168,380
26	Montana	9	16,200	60,173 34	40,619 34	45	39,159
27	Nebraska	43	66,400	311,628 07	200,382 21	30	452,402
28	Nevada	10	15,000	47,876 24	23,193 24	43	62,266
29	New Hampshire	30	49,100	211,842 05	127,544 36	31	346,991
30	New Jersey	60	112,000	747,758 04	482,708 24	19	1,131,116
31	New Mexico	7	12,900	50,643 27	32,726 27	41	119,565
32	New York	215	380,900	7,232,543 24	4,808,858 90	1	5,082,871
33	North Carolina	18	31,100	129,402 87	78,571 23	15	1,399,750
34	Ohio	134	244,200	2,235,798 87	1,490,633 73	3	3,198,062
35	Oregon	12	19,700	116,269 57	77,795 21	37	174,768
36	Pennsylvania	158	277,500	3,167,919 11	1,988,943 55	2	4,282,891
37	Rhode Island	11	22,600	288,881 73	194,100 44	33	276,531
38	South Carolina	16	26,300	153,054 95	103,077 02	21	995,577
39	Tennessee	24	40,700	835,699 62	225,218 04	12	1,542,359
40	Texas	66	109,500	570,289 52	387,500 78	11	1,591,749
41	Utah	6	10,300	66,767 64	42,534 64	39	143,963
42	Vermont	26	43,400	167,266 27	105,128 09	32	332,286
43	Virginia	29	53,600	367,711 48	234,086 15	14	1,512,565
44	Washington	9	14,200	40,628 78	22,208 78	42	75,116
45	West Virginia	13	22,200	106,394 12	61,537 83	29	618,457
64	Wisconsin	78	128,600	748,838 55	475,647 10	16	1,315,497
47	Wyoming	4	7,100	29,310 52	19,012 52	47	20,789
	Total	2,193	3,707,500	33,535,253 95	21,789,179 92		50,155,783

Grand total gross receipts	$33,535,253 95
Grand total postmasters' salaries	3,707,500 00
Grand total expenses	11,746,074 03
Grand total net receipts	21,789,179 92
Percentage of gross receipts absorbed by salaries	11.06
Percentage of gross receipts absorbed by total expenses	30.05

Grand total gross receipts for fiscal year ended June 30, 1883=74.28 per cent. of the revenue of the Post-Office Department for same period.

PAPERS

ACCOMPANYING

THE REPORT OF THE POSTMASTER-GENERAL.

ESTIMATES OF THE APPRORIATIONS FOR THE POSTAL SERVICE FOR THE FISCAL YEAR ENDING JUNE 30, 1885.

OFFICE OF THE POSTMASTER-GENERAL.

Mail depredations and post-office inspectors, and fees to United States marshals, attorneys, &c	$200,000 00
Inspectors' clerks	20,000 00
Advertising	20,000 00
Miscellaneous items in the office of the Postmaster-General	1,500 00

OFFICE OF THE FIRST ASSISTANT POSTMASTER-GENERAL.

For compensation to postmasters	12,250,000 00
For clerks in post-offices	4,900,000 00
For free-delivery service	3,800,000 00
For rent, fuel, and light	480,000 00
For office furniture	40,000 00
For stationery in post-offices	65,000 00
For miscellaneous and incidental items	90,000 00
For wrapping paper	30,000 00
For wrapping twine	80,000 00
For postmarking, rating, and canceling stamps	25,600 00
For letter balances, scales, and test-weights	35,000 00
For ink for stamping and canceling purposes For pads for stamping and canceling purposes	20,000 00

OFFICE OF THE SECOND ASSISTANT POSTMASTER-GENERAL.

Inland transportation, railroad routes	12,750,000 00
Railway post-office car service	1,625,000 00
Inland transportation, steamboat routes	625,000 00
Inland transportation, star routes	5,600,000 00
Railway postal clerks	4,295,289 60
Mail-messengers	1,100,000 00
Mail locks and keys	25,000 00
Mail-bags and mail-bag catchers	250,000 00
Miscellaneous items in the office of the Second Assistant Postmaster-General	1,000 00

OFFICE OF THE THIRD ASSISTANT POSTMASTER-GENERAL.

Adhesive postage stamps	146,000 00
Postage-stamp agency	8,100 00
Stamped envelopes and wrappers	644,000 00
Stamped envelope agency	16,000 00
Postal cards	268,000 00
Postal-card agency	7,300 00
Registered package, post-office and dead-letter envelopes, locks and seals	140,000 00
Ship, steamboat, and way letters	1,500 00
Engraving, printing, and binding drafts and warrants	2,500 00
Miscellaneous items in the office of the Third Assistant Postmaster-General	1,000 00

OFFICE OF THE SUPERINTENDENT OF FOREIGN MAILS.

Transportation of foreign mails		$425,000 00
Balances due foreign countries, including the United States' portion of the expenses of the International Bureau of the Universal Postal Union, and the subscription of the Department for the monthly journal (L'Union Postale) of that Bureau		75,000 00
Total		50,062,189 60

POSTAL REVENUE.

Estimated amount which will be provided by the Department from its own revenues, viz:		
Ordinary postal revenue	$46,674,078 31	
Money-order receipts	430,000 00	
		47,104,078 31

DEFICIENCY IN POSTAL REVENUE.

Leaving a deficiency in the revenue of the Post-Office Department to be provided for out of the general Treasury	2,958,111 29

W. Q. GRESHAM,
Postmaster-General.

OFFICE OF THE POSTMASTER-GENERAL,
October 30, 1883.

POST OFFICE DEPARTMENT,
OFFICE OF THIRD ASSISTANT POSTMASTER-GENERAL,
Washington, D. C., October 27, 1883.

SIR: In compliance with your directions, I have compiled and herewith beg to submit for your action table of estimates of appropriations for the service of the Post-Office Department for the fiscal year ending June 30, 1885. The papers from the several bureaus, marked from A to F, upon which the table was prepared, are also inclosed.

Very respectfully, your obedient servant,

A. D. HAZEN,
Third Assistant Postmaster-General.

Hon. WALTER Q. GRESHAM,
Postmaster-General.

A.

POST OFFICE DEPARTMENT,
OFFICE OF THE POSTMASTER-GENERAL,
Washington, D. C., September 21, 1883.

SIR: In response to your letter of the 13th instant, I have the honor to submit herewith estimates for the appropriations needed for the office of the Postmaster-General for the fiscal year ending June 30, 1885:

Mail depredations and post-office inspectors, including amounts necessary for fees to United States marshals, attorneys, &c	$200,000
Inspectors' clerks	20,000
Advertising	20,000
Miscellaneous items in the office of the Postmaster-General	1,500

Very respectfully,

C. M. WALKER,
Chief Clerk.

MADISON DAVIS, Esq.,
Acting Third Assistant Postmaster-General.

Comparative statement of expenditures in the office of the First Assistant Postmaster-General for the fiscal years 1881-'82 *and* 1882-'83; *of appropriations for the years* 1882-'83 *and* 1883-'84, *and of estimates for* 1883-'84 *and* 1884-'85.

Items.	Expenditures for fiscal year 1881-'82.	Appropriations for fiscal year 1882-'83.	Expenditures for fiscal year 1882-'83.	Increase of expenditures in 1882-'83 over 1881-'82.	Estimates for fiscal year 1883-'84.	Appropriations for fiscal year 1883-'84.	Estimates for fiscal year 1884-'85.	Increase of estimates for 1884-'85 over appropriations for 1883-'84.
For compensation to postmasters	$8,964,076 72	$8,800,000 00	$10,315,394 46	$1,350,717 74	$10,134,091 25	$9,250,000 00	$12,250,000 00	$3,000,000 00
For clerks in post-offices	3,908,396 60	4,385,000 00	4,267,079 41	358,682 81	4,850,000 00	4,775,000 00	4,900,000 00	125,000 00
For free-delivery service	2,623,262 74	3,000,000 00	3,173,306 51	550,043 77	3,600,000 00	3,500,000 00	4,000,000 00	500,000 00
Additional, act of August 7, 1882		200,000 00						
For rent, fuel, and light	401,978 04	450,000 00	431,039 77	29,061 73	450,000 00	440,000 00	480,000 00	40,000 00
For office furniture	20,716 64	20,000 00	19,815 38	*901 26	30,000 00	25,000 00	40,000 00	15,000 00
For stationery in post-offices	58,517 28	55,000 00	56,000 00	*1,517 28	65,000 00	60,000 00	65,000 00	5,000 00
For miscellaneous and incidental items	68,594 76	90,000 00	70,992 79	2,398 03	90,000 00	90,000 00	90,000 00	
For wrapping-paper	19,993 59	22,000 00	21,999 95	2,006 36	25,000 00	25,000 00	30,000 00	5,000 00
For wrapping-twine	52,754 64	55,000 00	59,999 93	7,245 29	55,000 00	55,000 00	80,000 00	25,000 00
Additional, act of March 3, 1883		5,000 00						
For postmarking, rating, and canceling stamps	14,144 30	15,000 00	14,992 46	848 16	25,000 00	20,000 00	25,000 00	5,000 00
For letter balances, scales, and test-weights	10,000 00	15,000 00	14,917 79	4,917 79	25,000 00	20,000 00	35,000 00	15,000 00
For ink, stamping and canceling purposes		35,000 00	34,544 54	34,544 54	10,000 00		20,000 00	20,000 00
For pads, stamping and canceling purposes					10,000 00			
Totals	16,141,035 31	17,147,000 00	18,579,082 99	2,438,047 68	19,369,091 25	18,260,000 00	22,015,000 00	3,755,000 00

* Decrease.

Expenditures for 1882-'83	$18,579,082 99	Expenditures for 1882-'83	$18,579,082 99	Estimate for 1884-'85	$22,015,000
Expenditures for 1881-'82	16,141,035 31	Appropriation for 1883-'84	18,260,000 00	Appropriation 1883-'84	18,260,000
Increase of expenditures for 1882-'83 over 1881-'82	2,438,047 68	Increase of expenditures 1882-'83 over appropriation for 1883-'84	319,082 99	Increase of estimate 1884-'85 over appropriation for 1883-'84	3,755,000

REPORT OF THE FIRST ASSISTANT POSTMASTER-GENERAL.

POST-OFFICE DEPARTMENT,
OFFICE OF FIRST ASSISTANT POSTMASTER-GENERAL,
Washington, D. C., November 1, 1883.

SIR: The average amount of work performed in each of the divisions of this office during the past fiscal year, except in a few instances, exceeded that of any previous year. In the establishment of a very large number of post-offices, and changes in the location of many already in existence; in the more thorough dissemination of information concerning the construction and interpretation of the postal laws, and in affording better and more numerous facilities for the proper transaction of business in post-offices, the Bureau has, so far as the appropriations would permit, endeavored to meet the necessities of an increasing population, assist in the activity of commercial circles, and keep pace with the construction and extension of the various railroads and other means of communication. It is believed that in no preceding year have fewer complaints been made concerning the incompetency or dishonesty of postmasters, or of delay or confusion in the delivery and dispatch of mail matter in the different post-offices.

The extensive and varied nature of the work performed in this office, and the impossibility of properly classifying and tabulating the amount transacted in some of its divisions, will prevent me from submitting a report of much of it in any other than a general form. Where details can be entered into, the report of the work of the office will be presented with more particularity.

Comparative statement of the number of post-offices established and discontinued, and of postmasters appointed for the fiscal years ended June 30, 1882, *and June* 30, 1883.

	June 30, 1882.	June 30, 1883.	Increase.	Decrease.
Number of offices established during the year	3,166	3,253	87	.....
Number discontinued	1,447	1,621	174	.....
Decrease (comparison of net increase for the year)	1,719	1,632	.....	87
Whole number of post-offices	46 231	47, 863	1,632	.....
Number filled by appointment of the President	1,951	2,143	192	.....
Number filled by appointment of Postmaster-General	44,280	45,720	1,440	.....
Appointments were made during the year:				
On resignations and commissions expired	7,346	7,734	388	.....
On removals and suspensions	1,021	705	.....	316
On change of names and sites	349	342	.....	7
On deaths of postmasters	461	468	7	.....
On establishment of new post-offices	3,166	3,253	87	.....
Total appointments	12,343	12,502	159	.....
Total number of cases acted on during the year	14,340	14,882	543	.....

From the above statement it will be observed that there was a small increase—87—in the number of post-offices established during the last fiscal year, as compared with the preceding year, and also an increase of 174 in the number of offices discontinued.

The whole number of post-offices June 30, 1883, was 47,863, an increase of 1,632 during the year. This increase, apportioned by sections and States and Territories, was as follows:

THE SIX NEW ENGLAND STATES.

Maine	18	Rhode Island	1
New Hampshire	11	Connecticut (decrease)	1
Vermont	7		
Massachusetts	0	Total	36

THE FIVE MIDDLE STATES, AND THE DISTRICT OF COLUMBIA.

New York	40	Maryland	49
New Jersey	11	District of Columbia	1
Delaware	2		
Pennsylvania	120	Total	223

THE FOURTEEN SOUTHERN STATES AND INDIAN TERRITORY.

Virginia	60	Texas	10
West Virginia	47	Arkansas	44
North Carolina	95	Missouri	48
South Carolina	35	Tennessee	90
Georgia	53	Kentucky	83
Florida	48	Indian Territory	12
Alabama	62		
Mississippi	29	Total	725
Louisiana	9		

THE TEN STATES AND SIX TERRITORIES OF THE WEST AND NORTHWEST.

Ohio	78	Colorado	49
Indiana	52	Dakota	172
Michigan	47	New Mexico	1
Illinois	37	Montana	14
Wisconsin	23	Wyoming	12
Iowa	12	Idaho	12
Minnesota	27	Utah	7
Kansas	3		
Nebraska	34	Total	580

THE THREE STATES AND THREE TERRITORIES OF THE PACIFIC SLOPE.

Oregon	10	Arizona	10
California	25	Alaska	2
Nevada	7		
Washington	14	Total	68

Pennsylvania has the largest number of post-offices of any of the States, as it has had for several years, the number being on June 30, 1883, 3,716. New York followed with 3,082, and Ohio was third in the list with 2,620. The largest increase in the number of post-offices in any of the States and Territories during the fiscal year was in Dakota, the number having been 172. Pennsylvania was next in the list with 120, and North Carolina was third, with an increase of 95. The smallest increase was in Rhode Island, it having been but 1. In Massachusetts there was no increase, and in Connecticut there was a decrease of 1.

Lancaster County, Pennsylvania, had the largest number of post-offices of any county in the United States on the 30th day of June last, the number being 158. Chester County, in the same State, was second in the list with 138, and Worcester County, Massachusetts, followed with 132.

The increase in the number of Presidential offices during the fiscal year was 192, a larger number than in any previous year. The whole number of this class of offices June 30, 1883, was 2,143. The largest increase was in Illinois, the number having been 16. New York had the greatest number of offices at which appointments are made by the President, the number having been 207. Illinois was next in order with 186.

The number of money-order offices at the end of the fiscal year was 5,857, an increase of 421 over the number for the previous year. Of offices of this class Illinois had the greatest number—515; Iowa followed with 420.

The number of resignations and commissions expired during the fiscal year exceeded those of the previous year by 388, a very large proportion of them being caused by a desire to engage in more profitable occupations. The removals and suspensions for the year were 316 less than for the year before, and 253 less than for the year ended June 30, 1881, an indication, undoubtedly, of an improvement in the character and habits of the persons now serving the public as postmasters.

The increase in the number of cases involving appointment to post-offices was, for the fiscal year, 159, a smaller increase than usual; and in the total number of cases acted upon, the increase for the year was 542.

Appended to this report will be found tables, marked A and B, pages 28 and 29, giving additional information concerning the establishment, discontinuance, &c., of post-offices and the appointment of postmasters during the year.

APPOINTMENT DIVISION.

To this division is assigned the preparation of cases for the establishment, discontinuance, or change of names and sites of post-offices, and for the appointment of all postmasters, besides much other clerical labor pertaining to the proper management of post-offices which it is unnecessary to specify. The following is a summary of the work performed during the last fiscal year so far as it can be readily shown. It must be understood, however, that the statement conveys but a partial idea of the nature of the clerical service or of the time occupied in its discharge.

Number of cases of all kinds made up	15,467
Number of cases acted upon affirmatively	14,781
Number of cases declined	598
Number of queries sent out affecting the establishment, discontinuance, &c., of post-offices	6,419
Number of circulars of inquiry, &c., mailed	29,854
Number of letters written	3,461
Number of cases referred to other bureaus of the Department, or to correspondents, for information	17,063
Number of Presidential cases acted upon	902
Number of offices placed in charge of sureties on account of death of postmaster, or for other causes	264
Number of letters, petitions, and other papers received, indorsed, and filed	99,016
Number of clerks in the division	13

Though the work of this division was, as a whole, very satisfactorily performed during the fiscal year, I have recently made some transfers among its employés, hoping thereby to render the service more perfect. It is observable that good results have already followed these changes.

BOND DIVISION.

This division records all appointments of postmasters, sends out the necessary papers for execution by the appointees and their assistants, and, after the acceptance of the bonds by the Postmaster-General, prepares and sends the commissions of the postmasters. Reports are also made of the principal daily and weekly operations of the division to several of the other bureaus and divisions of the Department. Much other clerical service is performed, such as the filing of the bonds and oaths of postmasters and their assistants, the sending out of circulars for the purpose of ascertaining the solvency of the sureties of postmasters, the mailing of new bonds for execution, &c.

The following statement shows the work of the division for the year, so far as it is practicable to present it in an intelligible form:

Number of entries made on the books of the division	63,978
Number of cases received for which appointment and other papers were mailed	14,682
Number of circulars sent calling for the execution of new bonds	1,510
Number of surety circulars sent to chief post-office inspector for report	2,935
Number of blank assistants and clerks' oaths sent by request of postmasters	23,731
Number of new bonds sent by request of postmasters	517
Number of new bonds sent by request of the Third Assistant Postmaster-General for increase of penalty	266
Number of new bonds sent for establishment of new money-order offices	435
Number of circulars sent to sureties who requested to be released from bonds	525
Number of cases in which post-office inspectors recommended new bonds	92
Number of circulars sent to sureties notifying them of postmasters' failure to deposit or pay contractors	463
Number of new bonds received	1,429
Number of reports received from post-office inspectors on validity of bonds	2,160
Number of postmasters, assistant postmasters and clerks' oaths received, indorsed, and filed	32,730
Number of bonds and oaths returned for correction	3,094
Number of bonds examined and passed for commissions	14,479
Number of bonds filed	13,908
Number of commissions mailed to postmasters	14,479
Number of letters written	425
Number of cases reported to report clerk	14,682
Number of established cases reported to Division of Post-Office Supplies	3,153
Number of Presidential cases for which appointment papers were forwarded	902
Number of circulars sent to postmasters accompanying new bonds	1,520
Number of circulars sent calling for execution and return of new money-order bonds	390
Number of circulars sent for appointments, establishments, change of name and sites, and discontinuances	34,712
Number of copies of postal laws and regulations forwarded	3,872
Number of new bonds sent to postmasters on report of post-office inspectors	97
Number of changes of post-offices and postmasters reported to Auditor for the Post-Office Department	14,882
Number of establishments, discontinuances, and changes of name or site of post-offices reported to the Second Assistant Postmaster-General	5,875
Number of establishments, discontinuances, and changes of name or site of post-offices reported to Third Assistant Postmaster-General	5,875
Number of establishments, discontinuances, and changes of name or site of post-offices reported to Equipment Division	5,875
Number of postmasters commissioned reported to Third Assistant Postmaster-General	14,479
Number of postmasters commissioned reported to the Auditor for the Post-Office Department	14,479
Number of new bonds accepted by the Postmaster-General and reported to the Third Assistant Postmaster-General	1,429
Number of postmasters commissioned reported for publication in the Postal Bulletin	14,479
Number of new bonds accepted by the Postmaster-General and reported for publication in the Postal Bulletin	1,429
Number of clerks in the division	13

Though there was a constant increase of work in this division during the year it was performed to better advantage than formerly, mainly on account of the reorganization of the force.

Some improvements of a substantial character are imperatively needed in this division for the better and safer keeping and protection of its records, especially the bonds of postmasters. These bonds now number about 48,000, of which more than 2,000 are of postmasters appointed by the President, and about 6,000 others are bonds of postmasters at money-order offices. The aggregate penalties of all of them amount to several millions of dollars. All these valuable papers are now kept in cases made of wood, which are fastened with only ordinary locks. Though these bonds are recorded, and the dates of their execution and the names of the sureties could be ascertained if any bond should be lost or stolen, yet the great value of these papers to the Department necessitates, in my opinion, some action towards keeping them with greater security. I hope that in the preparation of the estimates for the Department for the next fiscal year you will include an item for this purpose.

DIVISION OF POST-OFFICE SUPPLIES.

The title of this division was changed by the act of Congress approved March 3, 1883, from that of the blank agency of the Post-Office Department to that of the division of post-office supplies, in accordance with the recommendation in my last annual report. The business of the division remains mainly as heretofore, and consists in supplying the necessary blanks, twine, letter balances, and postmarking, and rating and canceling stamps to such postmasters as are by law entitled to the articles, to enable them to make up and dispatch mails, to report and record the same, and to render formal account of the business of their offices to the proper officers of this Department and to the Treasury. This division is also charged with keeping the accounts for departmental printing with the Government Printer, and with the distribution of the departmental stationery. The only additional work imposed upon it by the act above referred to was that of providing the post-offices of the first and second classes with the different articles of stationery (obtained after advertising and by contract) needed by them, upon estimates to be annually furnished by the postmasters. These offices are now 590 in number. The work of the division during the past year largely exceeded that performed in any previous year, as appears from the following comparative statement.

SUPPLIES FURNISHED.

Articles.	Fiscal year 1880–'81.	Fiscal year 1881–'82.	Fiscal year 1882–'83.
Blanks for statements and accounts of postmasters	36,361,000	48,176,950	50,156,464
Books for records of post-office business	84,821	82,793	119,529
Facing slips for letter packages and paper sacks	41,942,400	32,736,600	48,960,000
Marking and rating stamps of all kinds	6,692	6,589	16,556
Jute twine, pounds	393,902	443,102	584,699
Hemp twine, do	105,021	116,439	149,805
Cotton twine, do	.....	.....	71,018
Letter balances and scales	2,429	2,621	13,541
Wrapping paper, reams	12,244	13,821	20,839
Canceling ink	.....	.....	11,376
Inking pads, number	.....	.....	11,700
Wrapping paper (15,360 to the ream), reams	2,080	2,070	3,120

The increase in the issues of postmarking and rating stamps and letter balances is due in part to the appropriation of $35,000 made by the act of May 4, 1882, to supply fourth-class post-offices with these articles. The same act provided for the issue of canceling ink and inking pads to this class of offices. No appropriation for these purposes having been made for the year ending June 30, 1884, the issue for the articles was suspended at the end of the last fiscal year. The total appropriations and expenditures for the above articles during the fiscal year ended June 30, 1883, except blanks and books, was as follows:

Appropriations	$112,000 00
Expenditures	111,927 19
Balance unexpended	$72 81

Detailed statements of these expenditures will be found in the tables marked D, E, and F, appended to this report. In addition to these expenditures wrapping paper for facing slips, amounting to $4,025.63, was furnished the railway mail service upon requisition of the different superintendents, approved by the General Superintendent, and the cost thereof charged by the auditor to the appropriation for railway transportation. These slips are included in the table of supplies furnished, but not in the statement of appropriations and expenditures.

WRAPPING TWINE AND WRAPPING PAPER.

The consumption of twine has increased from 498,923 pounds in 1881 to 805,522 pounds in 1883, or more than 81 per cent. in two years; but owing to a reduction in the contract price, obtained by the use of a cheaper grade of jute and hemp twine, the expenditure for the year 1881–'82 was $52,754.64, against $84,603.38 for 1880–'81. The appropriation for 1882–'83 was $60,000 and for 1883–'84 is $55,000; but a deficiency of at least $15,000 is anticipated for the current year.

The appropriation for wrapping paper for the fiscal year 1882–'83 was $22,000; for the year 1883–'84 it is $25,000. It should be $30,000 for 1884–'85. The increase in the appropriations for the two items of twine and wrapping paper is recommended upon the ground that the reduction in the rate of letter postage will add largely to the volume of the mails, and therefore necessitate a corresponding increase in the use of twine and wrapping paper.

PRINTING, BINDING, &C., FOR THE DEPARTMENT.

This work is executed at the Government Printing Office, and the appropriations and expenditures for it (exclusive of that done for the money-order division), have been, for the past three fiscal years, as follows:

Fiscal years.	Appropriation.	Expenditure.
1880–'81	$150,000	$119,189 45
1881–'82	150,000	135,504 72
1882–'83	150,000	149,966 26

The appropriation for this purpose for the year 1883–'84 is also $150,000.

Under the new arrangement for supplying first and second class post-offices with stationery from this division, the cost of numerous blank books and printed blanks, which was formerly charged to the

appropriation for stationery in post-offices, will be charged to the appropriation for printing, binding, &c.; consequently a deficiency of $25,000 in this item is expected for the current fiscal year. It is very necessary, therefore, that the appropriation for printing, binding, &c., for this Department, for the fiscal year 1884–'85, should be materially larger than it has been for some years past.

STATIONERY IN POST-OFFICES.

In accordance with the recommendation in my last annual report the appropriation of $60,000 for stationery at first and second class post-offices, for the fiscal year ending June 30, 1884, was directed by the Postmaster-General to be expended through the division of post-office supplies; and Congress authorized the payment out of this appropriation of five clerks at $1,000 each per annum, and two laborers at $660 each, to assist in the distribution of the stationery to such post-offices as should be entitled to the same. This provision for clerical service leaves only $53,680 available out of the appropriation for the purchase of stationery for the present fiscal year, while during the year 1881–'82 the expenditure for this item amounted to $56,517.28. It is anticipated, however, that the saving resulting from the purchase of large quantities of stationery, under contract, and awarded after close competition, will enable the Department to furnish ample supplies of all necessary articles without exceeding the appropriation.

As before stated, a portion of the expenditure formerly charged to this appropriation will, under the new system, be paid out of the appropriation for printing and binding at the Government Printing Office, and will, therefore, not be charged as heretofore. I am convinced that this change in the manner of providing the first and second class offices with stationery will result beneficially to the Department; but it is too early in the fiscal year to estimate the amount that will be saved.

In the statement presented to you relative to certain proposed changes, as well as increase in the clerical force of this office for the next fiscal year, I have recommended that the clerks and laborers above referred to should hereafter be provided for in the legislative, executive, and judicial appropriation act, instead of being paid, as at present, by warrant on the Treasury, and out of the amount appropriated for stationery in post-offices. I have likewise suggested that instead of five clerks and two laborers for this service, there should be for the next fiscal year three clerks at $1,000 per annum each and four laborers at $660 each, as it has been ascertained that more manual than clerical labor is required in the distribution of the stationery.

STATIONERY FOR THE DEPARTMENT.

The appropriation for stationery for the Department for the fiscal year 1882–'83 was $9,000, all of which amount was expended under the superintendence of this office. The amount appropriated for this purpose for the fiscal year 1883–'84 is $9,000, and it is believed that a like sum will be sufficient for the next fiscal year.

POSTMARKING, RATING, AND CANCELING STAMPS, LETTER-BALANCES AND SCALES, AND STAMPING-INK AND PADS FOR POST-OFFICES, ESPECIALLY THOSE OF THE FOURTH CLASS.

Under the present postal regulations only post-offices of the first and second classes, or those of which the salaries of the postmasters are $2,000

and upward, are entitled to all the necessary supplies of the above character. Offices of the third class, the salaries at which are from $1,000 to (but not including) $2,000, receive all but stamping-ink and pads, and offices of the fourth class, the salaries at which are below $1,000, only receive marking, rating, and canceling stamps and letter-balances under certain restrictions, and are not supplied at the expense of the Department with stamping-ink and pads at all.

That such distinctions as the above are made by the postal regulations in regard to furnishing post-offices with the necessary facilities for postmarking and weighing, and canceling stamps upon matter deposited in post-offices for mailing is not due to lack of discretion by the Department. It has been compelled to make them in order that the amounts usually placed at its disposal by Congress for purchasing the above-mentioned articles should be used in such a manner as to afford the greatest satisfaction to the public and best protect the interests of the service. At the same time the Department has repeatedly called the attention of Congress to the urgent necessity of providing every post-office with these facilities for the proper transaction of its business, and as frequently has asked for appropriations for that purpose, but that body, until recently, has seemed to prefer that postmasters at the smaller offices should either do without the most of these supplies, or, if used, that it should be at their own expense.

Within the past four or five years the complaints of business men concerning illegibly postmarked and improperly rated letters and other mail matter have been so numerous and so well founded that Congress was under the necessity of complying with the requests of the Department in regard to the matter, and by the act of May 4, 1882, $35,000 was appropriated with a view of partly remedying it. This amount was expended during the last fiscal year, and with very perceptible benefit to the service and the people; but as no appropriation was made for this object for the present fiscal year, and several thousand offices are still unsupplied with suitable implements for the transaction of the postal business, letters are received almost daily in this office, principally from persons or firms having large correspondence, complaining of the indistinctness of the postmarks on envelopes, of the inferior quality of canceling-ink used in stamping, and of the improper cancellation of stamps.

I am confident you will agree with me that this apparent blemish upon the administration of the Department should be speedily effaced. The public, which so liberally supports the postal service, certainly have a right to expect that the evil will be remedied. It can only be done by means of suitable appropriations by Congress, and I am sure you will not hesitate to ask for them for this purpose.

Such appropriations should be sufficienty large to furnish these facilities to the existing fourth class offices remaining unsupplied, to the offices which will be established during the present and next fiscal year, and to such offices of the first, second, and third classes as are now without any of the needed implements of this character. Provision should also be made in granting the appropriations for resupplying these articles in post-offices where they have become worn out, injured, or destroyed.

This matter has been fully considered and explained in the estimates submitted by me for this office for the next fiscal year.

Appended to this report will be found Tables marked C, D, and E, giving additional information concerning the operations of the division of post-office supplies.

DIVISION OF POSTAL LAWS AND REGULATIONS.

The following is a summary of work performed in this division.

Number of letters written to postmasters and to private individuals involving decisions under postal regulations and laws during the past fiscal year	10,795
Number of telegrams ordering the forwarding of letters to office of First Assistant Postmaster-General, where they are to be held pending investigation as to whether the facts would justify their delivery to the writer	195
Number of newspapers and magazines claiming the right of admission as second-class matter that have been examined and admitted or rejected	3,226
Number of rulings made under postal regulations, and statutes which were of such general interest to postmasters and the public as to require their publication in the Postal Guide	238
Amount of money collected from publishers of second-class matter for violation of law in inclosing third-class matter in second-class publications	$2,006 47

This collection was made through the office of the Third Assistant Postmaster-General, as the result of decisions made in this office, and shows an increase of about 17 per cent. over the collections of the last fiscal year.

The increase in the correspondence of the office for the same period has exceeded 27 per cent.

The importance of the duties discharged by this division of the postal service was fully pointed out in my last yearly report, and it is unnecessary to again allude to them. It is sufficient to say that the postal revenues depend to a considerable extent upon the watchful care exercised in this division over the conduct of postmasters in properly classifying matter offered for mailing, and in enforcing the penalties imposed by statute for the violation of the postal laws. Publishers of legitimate newspapers are specially interested in sustaining the Department in its efforts, through this division, to exclude from the pound-rate all publications designed primarily for advertising purposes, or for free circulation, or for circulation at nominal rates. The strict enforcement of the law as to all publications of this character, will enable legitimate publications (favored by statute as an instrument of popular education) to sustain themselves by securing such local advertising support as would naturally come to them. Notwithstanding the perplexing questions presented, where the same correspondence is claimed by different persons, the decisions have been so satisfactory to all parties that no legal contests have followed, nor have postmasters in any instance been involved in any personal liabilities for their action under instructions issued through this division.

DEPOSITS FOR KEYS TO POST-OFFICE DRAWERS AND LOCK-BOXES.

A letter box or drawer may be considered a particular space in a post-office which for a consideration is set apart for the exclusive use of an individual for the greater facility in receiving his mail matter.

To still further facilitate the delivery of mail matter placed in letter boxes and drawers, certain of them are provided with locks, the keys to which being furnished the box-renter, he is enabled to obtain his mail matter at all times without delay.

The custody of the mail deposited in post-office letter-boxes and the responsibility for its safety necessarily lie with the Department, and such responsibility in the case of lock-boxes is terminated by the act of the box-renter unlocking his box and removing his mail therefrom. The only guard against theft of the mail deposited in post-office lock boxes and drawers is the sanctity of the lock upon the box or drawer, and it therefore becomes a necessity, demanded by a due regard for the

safety of the mails, that keys to post-office lock-boxes and drawers should be under the control of the Department, and kept from the possession of persons not entitled to their use.

To this end postmasters have been instructed to require from renters of post-office lock-boxes and drawers a small money deposit for the keys to such drawers and boxes, which deposit is held in trust by the postmaster, to be returned by him to the box or drawer renter whenever the keys for which the deposit was made are presented for redemption.

The boxes and drawers to which these keys belong (with the exception of a very few boxes erected by box-holders under authority of section 4052 of the Revised Statutes "for their own use, at their own expense"), are the private property of the postmasters. Their use is subject to and controlled by the regulations of the Department; but the Government neither owns nor repairs them. The deposi made to the postmaster to secure the safe return to him of the keys to such boxes and drawers cannot therefore be considered as any portion of the postal revenues, nor would it be desirable to commingle a special fund, held in trust, with ordinary or legitimate revenue. The postmaster receives the deposit in his official capacity, but he simply receives it as a trust fund to be returned to the depositor upon return of the key.

Some postmasters have utilized this deposit to reimburse themselves for the expense incurred in putting up, keeping in repair, or replacing locks and keys of boxes, and when depositors presented their keys for redemption no fund was available for that purpose. Many postmasters went out of office leaving large sums of money due to numerous depositors, and much complaint has been made against the Department because it had not placed itself in a position to protect the public.

To remedy this evil instructions have been given to all postmasters at offices not located in Government buildings to require a deposit of fifty cents for each key to a post-office drawer or lock-box rented by them, and on return of the keys refund the amount deposited therefor. The moneys so received by a postmaster constitute a fund held by him during his incumbency; and upon his resignation, removal, or death, it is turned over to his successor, accompanied by a statement of its condition. Postmasters are now required to keep a correct record of such deposits, showing the date, amount, and from whom received, and the date, amount, and to whom paid, and to forward to this office at the close of each quarter a statement of the key-deposit fund at their offices.

In view of the importance of protecting the safety of the mail deposited in such-boxes, and the absence of any legislation upon the subject, it was deemed proper to give such instructions as being necessary to the interests of the postal service, and to protect the patrons of post-office drawers and lock-boxes against the misapplication of the deposits made by them. A simple ledger account of the quarterly statement so rendered by postmasters is kept at this office.

Lock-boxes are now in use at 6,700 post-offices, the postmasters at which hold in trust an aggregate fund of $300,000 deposited with them by box-renters to secure the safe return of box-keys. This fund is available at all times for the purpose for which it was created, to the full number of keys in use, and at the same time the Department is assured that no key is being used upon a post-office drawer or lock-box unknown to the postmaster—a state of affairs which did not attain under former methods.

No complaint has been received at this office since the instructions above alluded to went into effect. It is believed that the action of this office fully meets the requirements of the case, and I therefore suggest that the present regulations be clothed with the authority of law.

LETTER-BOOK CLERKS.

The number of manuscript letters, orders, and reference papers recorded during the last fiscal year by the two clerks assigned to this duty amounted to 22,350.

During the same period it is estimated that 70,000 circulars and printed letters of inquiry or instruction were directed and mailed by these employés.

PRINCIPAL MESSENGER.

The employé acting in this capacity opens and distributes all ordinary mail matter of the Bureau, and receives, distributes, and accounts for all the express and registered matter which comes to his desk. The total number of letters, papers, requisitions, packages, &c., received, opened, distributed, and accounted for by him during the past year amounted to 643,594.

SALARY AND ALLOWANCE DIVISION.

The duties assigned to this division may be briefly stated as follows, viz: the adjustment of the salaries of Presidential postmasters, or postmasters of the first, second, and third classes; the examination of the quarterly returns or accounts of the said postmasters before they are finally passed by the Auditor of the Treasury for the Post-Office Department; the consideration of applications for allowances for clerk-hire, rent, fuel, light, stationery, furniture, and miscellaneous expenditures; the adjustment and regulation of the salaries and duties of the employés necessary for the proper transaction of the postal business in the larger post-offices; the leasing of buildings and quarters for post-offices; the supervision and regulation of box-rents and deposits for keys for lock-boxes, and the management of the large correspondence involved in transacting the important and manifold matters above outlined.

The duties of this division have been largely increased in consequence of the change of the rate of postage from three to two cents, and by the act of Congress approved March 3, 1883, requiring an adjustment of the salaries of Presidential postmasters to take effect October 1, 1883, simultaneously with the reduction of postage. This adjustment is now far enough advanced to warrant the statement that the result will be satisfactory. For the first time in the history of the Department the salaries of Presidential postmasters will be equalized and placed upon the basis of the gross receipts of their offices. The new law requires these salaries to be adjusted annually instead of biennially as heretofore. This additional duty, together with the unexampled growth of the postal service and increase of industries throughout the country, will more than do this branch of the work of this division.

On July 1 the Presidential offices numbered 2,176, and it is estimated that about 50 new offices per quarter will be added during the present year. To compute, review, and adjust the salaries at so many important offices requires clerical ability of a high order; and in the adjustment now in progress great embarrassment has been experienced on account of the need of a sufficient force of experienced clerks to review the returns properly.

The duty of regulating and collecting the "key-deposit trust-fund" has been added to this division, and has largely increased the business and correspondence incident thereto.

For convenience and brevity the various operations of this division during the past year are presented in the following statement:

Tabulated statement of the operations of the Salary and Allowance Division, for the fiscal year ended June 30, 1883.

Items for the fiscal year ended June 30, 1883.	Fiscal year 1882-'83.	
	Total number.	Aggregate allowance.
Number of letters received	10,520	
Number of letters written	10,002	
Number of circular letters sent out	14,482	
Number of allowances for clerk hire made	2,758	
Total amount allowed for clerks in post-offices		$4,385,000 00
Number of allowances for clerk hire declined	2,604	
Number of allowances for rent, fuel, and light made	2,461	
Total amount allowed for rent, fuel, and light		435,431 86
Number of allowances for rent, fuel, and light declined	622	
Number of allowances for miscellaneous items made	4,970	
Total amount allowed for miscellaneous items		71,763 34
Number of allowances for miscellaneous items declined	2,501	
Number of allowances for furniture made	543	
Total amount allowed for furniture		20,000 00
Number of allowances for furniture declined	915	
Number of allowances for stationery made	3,239	
Total amount allowed for stationery		56,784 05
Number of allowances for stationery declined	1,128	
Number of allowances for advertising made	368	
Total amount allowed for advertising		7,293 73
Number of allowances for advertising declined	120	
Number of cases sent to chief post-office inspector for information	368	
Number of fourth-class offices reported by the Auditor where the annual compensation of the postmaster amounted to $1,000, exclusive of money-order commissions	278	
Number of fourth-class offices assigned to the Presidential class	174	
Aggregate amount required to pay the salaries of postmasters at the above Presidential offices (174) for one year		218,000
Number of special adjustments of postmasters' salaries	172	
Aggregate sum required to pay the above increased salaries for one year		51,675
Number of postmasters' salaries reduced and discontinued	15	
Aggregate amount saved by salaries reduced and discontinued as above		8,000
Total number of salaries of postmasters adjusted during the year	361	
Aggregate amount of salaries involved in the (361) adjustments, as above		277,675
Number of first-class post-offices (salary of postmaster, $3,000 to $4,000 a year)	96	
Number of second-class post-offices (salary of postmaster, $2,000 to $2,900 a year)	542	
Number of third-class post-offices (salary of postmaster, $1,000 to $1,900 a year)	1,538	
Total number of Presidential post-offices, June 30, 1883	2,176	
Total amount required for salaries Presidential postmasters, as above (2,176), for one year		3,852,700 00
Number of lease cases prepared	156	
Number of leases in operation June 30, 1883	188	
Aggregate amount required to pay rent at post-offices and stations under lease		254,181 00
Allowances for clerk-hire, reduced and discontinued	217	
Amount saved by clerk-hire, reduced and discontinued		46,545 00
Number of cases of all kinds, made special	378	
Discontinued rent, fuel and light, railway mail service*	22	*7,671 00
Discontinued miscellaneous allowances, railway mail service*	15	*1,644 00
Number of claims for readjustment of postmasters' salaries, under act March 3, 1883, received and placed on file	6,507	
Average number of employés	5	

* Expenditures for railway mail service, transferred to Second Assistant Postmaster-General, from July 1, 1883.

A comparison of the above table with the report of the work performed in this division, as shown in the report of this office for the previous fiscal year, cannot fail to impress one with the vast increase in the work assigned to this division. For instance, the number of letters received for the year ended June 30, 1883, amounted to 10,520, an increase of 1,714, or 19.4 per cent., as compared with 1882, and 5,622, or 114.7 per cent. more than during 1880. The total number of letters written reached the large figure of 10,002, an increase of 2,604, or 35.1 per cent., over 1882, and 4,842, or 93.8 per cent., more than in 1880.

Two thousand seven hundred and fifty-eight allowances for clerk-hire were made; an increase of 478, or 20.9 per cent., over 1882, and 1,422, or

106.4 per cent., over 1880. The aggregate amount allowed for clerk-hire was $4,385,000, being the total sum appropriated for this purpose for the fiscal year.

Two thousand six hundred and four applications for clerk-hire were declined, an increase of 910, or 53.7 per cent., over 1882.

Two thousand four hundred and sixty-one allowances for rent, fuel, and light were made, and 622 applications for the same purpose declined.

Four thousand nine hundred and seventy miscellaneous allowances were made, and 2,501 applications for miscellaneous purposes declined.

Five hundred and forty-three allowances for furniture were made, and 915 requests for furniture were declined, chiefly because of the limited appropriation.

Three thousand two hundred and thirty-nine allowances for stationery were made, and 1,128 applications declined.

Three hundred and sixty-eight allowances for advertising were made, and 120 applications declined.

Three hundred and sixty-eight cases were sent to the chief post-office inspector for investigation, an increase of 179, or 94.1 per cent., as compared with 1882.

One hundred and seventy-four post-offices were added to the Presidential list during the year, making a total of 2,176 Presidential offices July 1, 1883.

Three hundred and sixty-one special adjustments of salaries of postmasters were made, involving an aggregate sum of $277,075.

Two hundred and seventeen allowances for clerk-hire were discontinued or reduced, making a saving of $46,545.

The following tabulated statement will show in concise form the operations of this division for the fiscal years ended June 30, 1880, 1881, 1882, and 1883, inclusive:

Table showing volume of business transacted in the Salary and Allowance Division, office of the First Assistant Postmaster-General, for the fiscal years ended June 30, 1880, 1881, 1882, and 1883, and the increase of work since 1880.

Items.	Fiscal year ended June 30—				Increase of work, 1883 over 1880.	
	1880.	1881.	1882.	1883.	No.	Per cent.
Number of letters received	4,898	4,255	8,806	10,520	5,532	110.90
Number of letters answered	5,160	4,751	7,398	10,002	4,842	93.83
Number of circular letters sent out	.....	.....	12,506	14,483	14,483	100.00
Number of allowances for clerk-hire made	1,336	1,694	2,280	2,758	1,422	106.51
Number of allowances for clerk-hire declined	1,929	1,663	1,694	b2,604	675	34.99
Number of allowances for rent, fuel, and light made	a382	a379	480	2,461	2,079	537.80
Number of allowances for rent, fuel, and light declined	a223	a144	171	b622	399	178.92
Number of allowances for miscellaneous items made	a484	a703	3,177	4,970	4,486	926.85
Number of allowances for miscellaneous items declined	a96	a534	a855	2,501	2,405	c400.00
Number of allowances for furniture made	a166	a117	258	543	377	227.11
Number of allowances for furniture declined	a596	a337	244	b915	319	53.52
Number of allowances for stationery made	a615	a635	2,628	3,239	2,624	426.66
Number of allowances for stationery declined	a19	a19	918	b1,128	1,101	d900.00
Number of allowances for advertising made	.....	.....	a21	368	368	100.00
Number of allowances for advertising declined	.....	.....	39	120	120	100.00
Number of cases referred to chief post-office inspector	48	34	189	368	320	666.66
Number of special adjustments postmasters' salaries	.....	251	238	349	257	279.34
Number of biennial adjustments postmasters' salaries	1,764	.....	2,013	(b)	.....	.....

a Railway mail service expenditures transferred to Second Assistant Postmaster-General, from July 1, 1882.

b An adjustment of all Presidentials (2,170 in number) is being made under the act of March 3, 1883.

c Only an estimate can be made.

d A fair estimate.

Table showing volume of business transacted in Salary and Allowance Division, &c.—Cont'd.

Items.	Fiscal year ended June 30—				Increase of work, 1883 over 1880.	
	1880.	1881.	1882.	1883.	No.	Pr. cent
Number of fourth-class post-offices reported by the Auditor where the annual compensation of the postmaster amounts to $1,000, exclusive of money-order fees	117	152	192	298	181	154.70
Number of Presidential offices relegated to fourth class	.....	.....	9	15	15	100.00
Number of fourth-class offices assigned to the third class	99	113	145	174	75	75.75
Number of lease cases prepared	.....	.....	33	176	176	100.00
Number of leases in operation	.....	.....	313	228	228	100.00
Number of cases, of all kinds, made special	.....	117	787	378	378	100.00
Discontinued rent	.....	.....	5	22	22	100.00
Discontinued clerk-hire	.....	.....	17	217	217	100.00
Number of Presidential post-offices	1,764	1,863	2,003	2,176	412	23.23
Number of claims for readjustment of postmasters' salaries, known as Spaulding claims	.....	.....	.....	6,567	.....	.....
Number of railway mail service allowances made	.....	*a*74	(*a*)	.....	.....	.....
Number of employés (average)	3	3	4	5	.....	.....
Grand total of increase of work, fiscal year 1883 over 1880	.....	.....	.....	.....	50,160	6,186.90

a Railway mail service expenditures transferred to Second Assistant Postmaster-General, from July 1, 1882.

CLERKS IN POST-OFFICES.

This is the most important item of expense in the administration of this office. No other fund is so closely identified with the interests of the public. As this appropriation is increased or limited, the mails are handled with greater or less dispatch and efficiency. To apportion this fund properly, giving needed relief, temporary or permanent, as the service demands, requires constant care and watchfulness.

As an evidence of the increased requirements of the service, and the close surveillance of this important subject, your attention is called to the fact that 2,758 allowances for clerk hire were made during the last fiscal year, an increase of 478, or 20.9 per cent., as compared with the previous year, and 1,422, or 106.4 per cent., more than were made in 1880–'81. Two thousand six hundred and four applications for clerical assistance were declined, chiefly because the appropriation was exhausted. In fact, in order to meet the urgent demands of the service, and at the same time keep the expenditures within the limited appropriation at the disposal of the Department, it was necessary to "create" a fund by making reductions at 195 offices. This reduction was made after a careful examination of the allowances, and took effect April 1, 1883. One-quarter of the fund so "created" was used to give relief at points where additional clerks were absolutely needed to work off accumulated and delayed mails and prevent further complications.

This expedient, being somewhat in the nature of "heroic treatment," should not be resorted to, except under similar urgent circumstances, and I hope such an occasion will not occur again. Congress should make ample provisions for this service. The duties required are onerous and exacting, and, as a rule, post-office clerks are underpaid. This is especially the case at "separating offices," or offices of the third and fourth classes. Considerable attention has been given to this branch of the service during the past year, as it can be greatly improved. "Separating clerks" have not been paid enough to induce them to take a proper interest in their work. As far as possible it has been my endeavor to remedy this defect, but much yet remains to be accomplished

in this direction. The list of "separating offices," or offices where postmasters are allowed clerk hire on account of "separating" mails for other offices, has been increased to 1,732. This number should be largely increased during the present fiscal year, as many postmasters at offices of this character are now compelled to employ clerks at their own expense. This is wrong, and should be remedied. These postmasters are entitled to relief. The burdens imposed upon them by the present unjust and unsatisfactory system should be assumed by the Government. They should not be obliged to pay for the labor of separating mails for other offices.

OFFICE FURNITURE.

The appropriation for this purpose for the present fiscal year is $25,000. This amount, in my judgment, is entirely too small. During the year just closed, many postmasters have purchased at their own risk articles of furniture absolutely required in transacting the postal business at their offices. Some of these postmasters, knowing that their expenditures for furniture could not be approved by the Department, on account of the limited fund at its disposal, have not presented their bills. A large majority, however, not being so patriotic or modest, have sent in their accounts, only to be declined. The aggregate amount disallowed being $6,173.87, not less than $4,500 of this amount could have been properly allowed, if the appropriation for this purpose would have warranted it. Again, the item of safes for use in post offices is a heavier one than the appropriation can carry. Under dates of March 27, 1882, August 18, 1882, and December 15, 1882, bids were accepted for safes for post-offices, calling for an aggregate sum of $13,501. The bills for this entire amount ($13,501) were submitted for payment during the year, although the cost of the safes ordered March 27, 1882, in the sum of $4,246, should have been charged to the appropriation for furniture for the fiscal year ended June 30, 1882, instead of the fiscal year ended June 30, 1883, as the record shows. These safes have been furnished in good faith at very reasonable prices, and, in most cases, the postmasters have anticipated their payment by the Department by paying the bills as presented from their own funds. I therefore recommend that provision be made to pay these accounts, amounting in the aggregate to $5,722.

From what has been said on this subject, together with the well-known fact that the majority of the offices throughout the country are in great need of suitable furniture, such as tables, mailing cases, desks, pouch racks, safes, chairs, &c., to facilitate the transaction of the heavy and increasing postal business, I deem it my duty to recommend $40,000 for furniture for post-offices for the fiscal year ending June 30, 1885. Either this amount ($40,000) should be appropriated for furniture, including safes, or separate appropriations, each in the sum of $20,000, should be submitted for furniture and for safes. There are now no less than sixty applications for safes which deserve immediate attention, and which, at the average of prices named in the three bids accepted last year, would involve an expenditure of not less than $18,000. These applications are held up because the limited fund at the disposal of the Department will not warrant their approval.

LEASES.

During the year 156 lease cases were prepared, and at the close of the year, June 30, 1883, 188 leases were in operation, involving an aggregate sum of $254,181 for rent.

The leasing of buildings, rooms, and fixtures for postal purposes is one of the most important duties of this division, not only because the Government does not own suitable buildings for post-offices, but also because the additional facilities for the transaction of postal business secured by leasing better accommodations results in a better service and in largely increasing the revenues of the Department.

This increase of revenue is substantial evidence that the people appreciate improvements in this direction. And there is room for advancement, for many of the first and second class offices, not to speak of the third class, in my opinion, are totally unfit for use, and the accommodations at a majority of the offices are not sufficient to meet the requirements of the present service.

I am strongly of the opinion that it is the duty of the Government to furnish roomy and well-arranged offices for the transaction of the postal business. Such a policy will increase the revenues of the Department, and the citizens in the communities directly benefited will take pride in furthering the interests of the service. That this policy would be a wise one cannot be doubted, especially when substantiated by the results obtained during the past year at nineteen first and second class post-offices, where new leases and improvements were made, as shown by the following tabulated statement:

Table showing the box rents which accrued for the four quarters ended March 31, 1882, and for the four quarters ended June 30, 1883, at nineteen of the first and second class post-offices whereat improvements have been completed six months or more.

	Offices.	Box rents.						Date of improvement.
		Four quarters ended March 31, 1882.	Four quarters ended June 30, 1883.	Increase.	Per cent. increase.	Decrease.	Per cent. decrease.	
1	Ann Arbor, Mich	$2,202 00	$2,398 00	$196 00	04.6			Jan. 1, 1883
2	Adrian, Mich	1,531 60	1,772 00	241 00	15.7			Apr. 9, 1883
3	Aurora, Ill	1,247 00	2,089 00	842 00	67.5			Jan. 1, 1883
4	Butte City, Mont	3,014 00	5,240 00	2,226 00	73.5			Oct. 24, 1882
5	Hamilton, Ohio	1,161 00	1,308 00	147 00	12.6			Jan. 1, 1883
6	Houston, Tex*	1,764 00	1,722 00			$42 00	02.3	Aug. 1, 1882
7	Ithaca, N. Y	1,245 00	2,094 00	849 00	68.1			July 1, 1882
8	Jamestown, N. Y	1,906 00	3,227 00	1,321 00	69.3			May 1, 1882
9	Kansas City, Mo*	919 00	973 00	54 00	05.8			Jan. 1, 1883
10	La Porte, Ind	859 00	1,150 00	291 00	33.8			Jan. 1, 1883
11	Lockport, N. Y	2,645 00	2,902 00	257 00	09.7			Apr. 1, 1882
12	Minneapolis, Minn*	3,055 00	5,231 00	2,176 00	71.2			July 1, 1882
13	Monmouth, Ill	1,036 00	1,205 00	169 00	16.3			Jan. 1, 1883
14	Oil City, Pa	1,652 00	1,617 00			35 00	02.1	Apr. 1, 1882
15	Ottumwa, Iowa*	1,380 00	1,604 00	224 00	16.2			Jan. 1, 1883
16	Peoria, Ill*	773 00	1,109 00	336 00	43.4			Jan. 1, 1883
17	Saratoga Springs, N. Y	1,994 00	2,320 00	326 00	16.3			Jan. 1, 1883
18	Troy, N. Y*	499 00	616 00	117 00	23.4			Mar. 1, 1882
19	Waterbury, Conn	2,660 00	4,551 00	1,891 00	71.0			Apr. 1, 1882
	Total	31,632 00	43,128 00	15,573 00	618.4	77 00	04.0	
	Average per office			680 76	36.37	38 50	02.2	
	Average increase of box rents.		680 76					
	Average increase of rent		425 21					
	Net gain per office		255 55					

* Free-delivery office.

Total increase of annual rent, $8,079, or an average of $425.21 for each office.

Total increase of gross receipts which accrued at the above-named offices (nineteen in number) for the four quarters ended June 30, 1883, $129,730, or an average of $6,828.

It will be observed that the total increase of gross receipts which accrued at the nineteen offices named for the four quarters ended June 30, 1883, amounted to $129,730, or an average increase of $6,828 for each office; and that the total increase of box rents (largely on account of additional and improved fixtures) amounted to $15,573, or an average of $680.76 for each office; the average increase in rent paid under the leases at the same nineteen offices amounted to $425.21 for each office, showing a net gain from box rents of $255.55 for each office.

It should be stated that the offices named above include six free-delivery offices, or offices where the carrier system has been established, and where, of course, box rents are largely reduced in consequence.

In all cases where new leases were made, every precaution was taken to secure the best possible terms for the Government. The cases were sent out to trusted agents of the Department, who personally visited the different cities, and after careful and thorough investigation made reports and recommendations upon the facts thus obtained. In almost all cases the recommendations of the inspectors were approved, and the results have proven the wisdom of their recommendations, and is good evidence of the care and faithfulness with which they carried out the instructions of the Department.

In some instances, perhaps, leases might have been made at lower figures, but in each case a decision was made after careful consideration of all the facts bearing upon the particular lease in question, keeping in view the interests of the Government, and the public convenience.

Before leaving this subject, I wish to say that, as a result of my experience in postal matters, and the renting of buildings and rooms for post-offices in particular, I can see no good reason why the Government should not provide for paying the *office rent at post-offices of the third class*, as well as at first and second class offices. It is a great hardship on postmasters at offices of the third class to compel them to furnish a place and provide the necessary fixtures for the transaction of the postal business in the communities in which they live. These postmasters are now obliged to pay for rent, fuel, and light, and furnish their own boxes, fixtures, stationery, and incidentals, and, in many cases, a large part of the clerical assistance, from their not over generous salaries.

This hardship can be remedied, in part, by Congressional provision for paying rent at offices of the third class. I shall call attention to this important subject in another part of this report.

The leasing operations for the year are summarized in the following table, showing that new leases and improvements were made at twenty-five offices, and also the date of improvement, the annual rent heretofore paid, and the increase of rent, amount and per cent., and the box-rents and gross receipts which accrued at the offices named for the four quarters ended March 31, 1882, and the four quarters ended June 30, 1883, together with the increase of box rents and gross receipts for the same time. The table shows that the aggregate annual rent heretofore paid amounted to $20,012; and the aggregate sum now required $34,685, an increase of $14,673. It is also shown that the total amount of box rent collected for the four quarters ended June 30, 1883, at the twenty-five offices mentioned, was $43,637, or an increase of $9,175 as compared with the four quarters ended March 31, 1883. The gross receipts which accrued at the same offices for the four quarters ended June 30, 1883, amounted to $901,647, and the increase of gross receipts to $151,799, or 20.24 per cent.

Tabulated statement of leases and improvements made at 25 of the principal post-offices, showing the location of the offices, date of lease and improvements, amount of annual rent and increase thereof, together with the box rents and gross receipts which accrued thereat.

No.	Offices.	Completion of improvements.	Rent paid for post-office.				Box rents collected.				Gross receipts.			
			From—	To—	Increase.	Percentage of increase.	March 31, 1882.	June 30, 1883.	Amount of increase.	Percentage of increase.	March 31, 1882.	June 30, 1883.	Amount of increase.	Percentage of increase.
1	Ann Arbor, Mich	Jan. 1, 1883	$405	$1,200	$795	196.2	$2,292	$2,398	$106	04.6	$20,422	$21,920	$1,498	07.3
2	Aurora, Ill	Jan. 1, 1883	600	1,000	400	66.6	1,247	2,089	842	67.5	14,990	17,283	2,293	15.2
3	Birmingham, Ala		200	975	775	387.5	1,004	2,030	1,026	102.2	9,844	16,472	6,628	67.3
4	Butte City, Mont	Oct. 24, 1882	600	1,560	960	160.0	3,014	5,240	2,226	73.5	14,552	18,252	3,700	25.4
5	Duluth, Minn	June 1, 1883	900	1,200	300	33.3	945	1,227	282	29.8	10,653	16,213	5,560	52.1
6	Frederick, Md	July 1, 1883	400	1,000	600	150.0	1,099	1,208	109	09.9	11,181	11,477	296	02.6
7	Hornellsville, N. Y		500	1,000	500	100.0	1,170	1,490	320	27.3	12,608	14,307	1,699	13.4
8	Kansas City, Mo	Jan. 1, 1883	3,000	3,000	.....	.....	919	973	54	05.8	162,502	188,977	26,475	16.2
9	Laporte, Ind	Jan. 1, 1883	400	800	400	100.0	859	1,150	291	33.8	10,977	11,733	756	06.8
10	Little Falls, N. Y		500	650	150	30.0	665	849	184	27.6	11,119	13,520	2,401	21.5
11	Lowell, Mass	May 1, 1883	2,000	3,000	1,000	50.0	2,356	2,413	57	02.4	64,045	78,966	14,921	23.2
12	Meadville, Pa	May 1, 1883	500	1,000	500	100.0	1,545	2,416	871	56.3	15,342	16,813	1,471	09.5
13	Monmouth, Ill	Jan. 1, 1883	101	400	299	296.0	1,036	1,205	169	16.3	10,100	11,395	1,295	12.8
14	New Albany, Ind	Apr. 1, 1883	450	1,000	550	122.2	1,405	1,472	67	04.7	11,696	12,958	1,262	10.7
15	Peoria, Ill	Jan. 1, 1883	1,500	2,500	1,000	66.6	773	1,109	336	43.4	65,937	71,395	5,458	08.7
16	Paterson, N. J	May 15, 1883	800	1,300	500	62.5	957	1,036	79	08.2	31,404	35,054	3,650	11.3
17	Pueblo, Colo	Nov. 15, 1882	600	900	300	50.0	1,903	2,596	693	32.2	18,295	16,859	1,436	07.8
18	Rochester, N. Y	Apr. 1, 1883	3,056	4,000	944	30.8	2,232	2,292	60	02.6	184,955	249,333	64,378	34.8
19	Rock Island, Ill	Nov. 19, 1883	1,000	1,400	400	40.0	1,778	2,081	303	17.4	18,186	18,626	440	02.4
20	Salem, Mass	Jan. 21, 1883	600	2,000	1,400	233.3	1,217	1,319	102	08.3	24,763	26,304	1,541	06.2
21	Saratoga Springs, N. Y	Jan. 1, 1883	900	1,500	600	66.6	1,994	2,320	326	16.3	26,170	18,170	8,000	30.5
22	Schenectady, N. Y		500	1,000	500	100.0	1,300	1,702	402	30.9	14,830	17,571	2,741	18.4
23	Sidney, Ohio	Apr. 1, 1883	100	500	400	400.0	577	726	149	25.8	6,800	8,004	1,144	16.6
24	Steubenville, Ohio	Feb. 1, 1883	400	1,200	800	200.0	1,255	1,408	153	12.1	14,347	15,401	1,054	07.3
25	Troy, Ohio	July 1, 1883	.....	600	600	600.0	850	878	28	03.2	8,535	9,673	1,138	13.3
	Totals		20,012	34,085	14,673	3641.6	34,452	43,627	9,175	662.1	749,848	901,647	151,799	403.0

*Decrease, not included in total.

BOX RENTS.

The system inaugurated last year by which box-rent rates in the larger offices are supervised and regulated by the Department has been attended with success during the year just closed, and I am glad to be able to report that the friction caused last year in reducing the plan to practice has almost entirely disappeared. Box-rent rates are gradually being equalized throughout the country, regard for local circumstances and the benefits afforded the patrons of the offices being taken into consideration in each case.

Although this work involves much care and nicety of judgment, the improvement in the service and the largely increased revenues derived from this service amply repay for the extra duty required.

SALARIES OF PRESIDENTIAL POSTMASTERS.

At the present writing the aggregate sum of the annual salaries of the 2,195 Presidential postmasters amounts to $3,750,000, 44 new offices having been added to the list during the past quarter. It is thought that about 90 additional offices will be assigned to this grade during the present fiscal year.

As the salaries of Presidential postmasters are now adjusted and fixed upon the basis of gross receipts accruing at their respective offices, or, in other words, the revenue returned by each office, the amount required to compensate postmasters depends largely upon the business interests of the country. The result of the recent reduction of postage from three to two cents, from October 1, 1883, is also involved, for it is hardly necessary to say that the result of this reduction, so far as the revenues of the Department are concerned, is yet problematical. With favorable surroundings, such as we have a reasonable right to expect, the adjustment of salaries of Presidential postmasters for the fiscal year ending June 30, 1885, will in my opinion involve, in round numbers, not less than $4,000,000.

THE FREE-DELIVERY SYSTEM.

This system was continued in operation during the year in 112 of the principal cities, to which were added at various times 42 additional free-delivery cities, making 154, and employing in the aggregate 3,680 men. The regular appropriation for this service was $3,000,000; to which was added by special appropriation to carry out the act of August 2, 1882, $200,000, making $3,200,000, an increase of $575,000 over that of the preceding year. The total cost of the service was $3,173,336.51, leaving an unexpended balance of $26,663.49. The increase of the cost of the service over that of the preceding year was $550,073.77. This was owing to the extension of the service to 42 additional cities, employing in the aggregate 222 carriers, also the appointment of 343 additional carriers in the older free-delivery cities; likewise to the increased pay of auxiliary carriers from $400 to $600, and the promotion of carriers from the lower grades to the next higher grade at the expiration of one year's service, as required by the act of August 2, 1882. Prior to the passage of this act auxiliary carriers were appointed at $400 per annum, and promoted to fill vacancies in the higher grades, under the act of February 21, 1879. Under this latter act the promotion of carriers to vacancies involved no additional cost, as the carrier who succeeded to the vacancy simply received the pay of the outgoing one, and his place in turn was filled at the lowest rate ($400).

This service was established at different times during the year at Lewiston, Me.; Taunton, Haverhill, Holyoke, Gloucester, and Pittsfield, Mass.; Newport and Pawtucket, R. I.; Binghamton, Yonkers, and Watertown, N. Y.; Allentown, Altoona, Williamsport, Wilkes Barre, and York, Pa.; Lynchburg, Va.; Wilmington, N. C.; Jacksonville, Fla.; Knoxville, Tenn.; Lexington, Ky.; San Antonio and Austin, Tex.; Canton, Sandusky, and Youngstown, Ohio; South Bend, Ind.; Rockford and Galesburg, Ill.; Cedar Rapids, Council Bluffs, and Keokuk, Iowa; Kalamazoo, East Saginaw, Lansing, and Bay City, Mich.; Racine, Oshkosh, and Madison, Wis.; Lincoln, Nebr.; Atchison, Kans., and Hannibal, Mo. The service in these cities is in successful operation, and has been generally adopted by the people in preference to the office delivery.

POSTAGE ON LOCAL MATTER.

The postage on local matter at the several free-delivery offices amounted to $4,195,230.52, an increase over that of the preceding year of $378,654.43; and also over the total cost of the service of $1,021,894.01. This increase in postage on local matter was 9.92 per cent., while the increase in the cost of the service was 20.96 per cent., attributable to the requirements of the act of August 2, 1882. The average cost per piece for handling matter was 2.4 mills, an increase of 0.1 mill as compared with last year. The average cost per carrier was $859.95, an increase of $24.20 over the preceding year.

Aggregate result of free-delivery service for fiscal year ended June 30, 1883.

Statistics of free delivery.	Total.	Increase over last year.	Per cent. of increase.
Number of offices	154	42	36.60
Number of carriers	3,680	565	18.10
Mail letters delivered	342,013,750	43,747,011	14.66
Mail postal cards delivered	86,133,228	14,651,486	20.49
Local letters delivered	104,437,146	14,434,829	16.03
Local postal cards delivered	60,472,192	9,548,469	18.75
Registered letters delivered	2,830,203	277,309	10.86
Newspapers delivered	203,568,905	42,773,299	26.60
Letters collected	345,317,803	36,964,984	11.66
Postal cards collected	115,113,531	15,692,399	15.78
Newspapers collected	64,761,842	3,928,028	4.90
Whole number of pieces handled	1,324,037,701	181,118,814	15.83
Pieces handled per carrier	359,955	* 7,560	1.99
Total cost of service, including pay of post-office inspectors	$3,173,336 51	†$550,079 77	20.96
Average cost per piece, in mills	2.4	0.1	4.34
Average cost per carrier‡	$859 95	$24 20	2.89
Amount of postage on local matter	4,195,230 53	378,654 43	9.92
Excess of postage on local matter over total cost of service	1,021,894 01	* 171,419 34	14.36

* Decrease.
† Increase.
‡ Based on the aggregate ($3,164,628.03) paid carriers, including incidental expenses at the several offices, less $8,708.48 paid post-office inspectors.

Under the law as it now stands this system may be established in any place having within its corporate limits 20,000 inhabitants and at any post-office whose gross revenue for the preceding fiscal year amounted to $20,000. There is, however, a class of towns in densely populated portions of the country which cannot be reached under the law, and which it is believed could be served by carriers with benefit to the people and economy to the Department. I refer to towns within short distances of one another which have not, singly, the required

qualifications of population or gross revenue, but which have in the aggregate more than the required population or gross revenue.

To meet this want it is suggested that the law be so amended as to authorize the Department to extend this system to such places. This could easily be done by establishing the system at the principal or central office of a group, and discontinuing the other offices, or substituting for them inexpensive branches of the main office from which carriers could serve the several surrounding localities.

A SPECIAL STAMP FOR SPECIAL DELIVERY.

In view of the large excess of postage on local matter alone over the entire cost of the service ($1,021,894.01), and in view of the fact that experience has demonstrated that local correspondence is increased in proportion, especially in the large cities, and hence the postage on local matter in proportion to the facilities given, I have no hesitation in recommending its extension, nor in advising liberal appropriations to bring it up to the highest practicable standard in cities where it is now in operation.

As stated in my last report, this service meets the general demands of business and social life, but fails to meet the dispatch required in the delivery of letters of exceptional importance.

Letters are now delivered by carriers at stated hours during the day from about 7 a. m. to 6 p. m., the frequency of trips varying in different cities, and also in the same city, more frequent deliveries being made in the business, and less frequent in the surburban districts. Between these deliveries two or three hours frequently intervene in the larger cities, and a longer time in the smaller ones, where the deliveries are less frequent. Letters received, therefore, after the carriers go out on their trips, whatever their importance, must lie in the office till the next trip. After the close of the deliveries for the day, carriers' letters must lie over till the next morning delivery, which delay, in many instances, fails to meet the wants of the writer or the object of the communication. Out of this want of a more speedy delivery have grown up in several of the large cities private enterprises which are now conducted in competition with this service, and are diverting from the legitimate revenues of the Department thousands of dollars yearly. The patronage bestowed on these enterprises evinces a public demand for a more speedy delivery of a certain class of correspondence. To meet this want and to secure the entire postal business of this country, which properly belongs to the Department, it is suggested that a special stamp be provided, which, when affixed to a letter, whether mail or local, in addition to the ordinary postage stamp, shall be regarded by the office addressed as entitling the letter to immediate delivery up to 10 o'clock p. m.

To provide for the instant delivery of letters bearing this special stamp it is suggested that boys be employed and required to procure receipts from the party addressed, or some one authorized by him to receive such letters in a book to be furnished for the purpose, which shall be kept in the office, and at all times subject to examination by an inspector of the Department.

REDUCTION OF POSTAGE ON LOCAL LETTERS.

In view of the large excess of postage on local matter alone over the entire cost of the service ($1,021,894.01), it seems to me the time has arrived when the postage on local letters at offices where the carrier system is in operation can be reduced from two cents to one cent. such a reduction, I feel certain, will result in a very large increase of

local business. Reports made by inspectors of the Department, in their investigation of the unlawful dispatch companies, which have been doing business in New York for many years, show that the Department is losing thousands of dollars annually by the competition of these companies. It is true that the courts have decided the business being carried on by these companies to be illegal, and suits are now pending in the United States court against a number of such companies. The argument advanced by the proprietors of the private dispatch companies and some of their patrons, that they give a better service than the Department is able to give, is not borne out by the facts. The private companies make but from two to three deliveries per day, while in one portion of New York City the Department makes nine deliveries, and in many parts of the city five, and in no portion of the city less than three deliveries per day. The only thing that can be gained by the patrons of the private dispatch companies is the saving of money, these companies charging but one cent while the Government charges two cents local postage. I am fully convinced that a reduction of local postage would result in a very great increase of business, as well as meet the demands of the cities now served by carriers.

No branch of the service has grown more rapidly or produced better results than the free-delivery service. It should be the policy of the Department to improve the efficiency of the service where it now exists, and urge upon Congress the granting of an appropriation sufficient to extend it to all cities entitled to it under the law.

REVIEW OF THE SERVICE.

With this report closes twenty years of this service, it having been inaugurated July 1, 1863. Beginning with the single idea of delivering and collecting mail matter by carrier in cities, and without other information on the subject, its operations could be systematized only as experience suggested better methods of performing a great variety of details. Years necessarily elapsed before this could be done, and the present plan of reports could be formulated. The earlier reports were therefore incomplete and unsatisfactory; still a summary of the growth of the service as compiled from them may prove interesting.

Years.	Number of offices.	Number of carriers.	Cost of service.	Postage on local matter.	Excess of cost.	Excess of postage on local matter.
1863–'64	66	685	$317,001 22			
1864–'65	45	757	448,664 51			
1865–'66	46	863	589,236 41			
1866–'67	47	943	699,934 34			
1867–'68	48	1,198	995,934 59			
1868–'69	48	1,246	1,183,915 31			
1869–'70	51	1,362	1,230,079 85	$681,864 70	$548,215 15	
1870–'71	52	1,419	1,353,923 23	758,120 78	595,802 45	
1871–'72	52	1,443	1,385,905 76	907,351 93	478,613 83	
1872–'73	52	1,499	1,422,495 48	1,112,251 21	310,244 27	
1873–'74	87	2,049	1,802,696 41	1,611,481 66	191,214 75	
1874–'75	87	2,195	1,880,041 99	1,947,599 54		$67,517 55
1875–'76	87	2,269	1,981,186 51	2,065,561 73		84,375 22
1876–'77	87	2,265	1,893,619 85	2,254,597 83		360,977 98
1877–'78	87	2,275	1,824,166 96	2,452,251 51		628,084 55
1878–'79	88	2,359	1,947,706 61	2,812,523 86		864,771 14
1879–'80	104	2,688	2,363,693 14	3,068,797 14		705,104 00
1880–'81	109	2,861	2,499,911 54	3,273,630 39		773,718 85
1881–'82	112	3,115	2,623,262 74	3,816,576 09		1,193,313 35
1882–'83	154	3,680	3,173,336 51	4,195,230 52		* 1,021,894 01

* The apparent reduction in postage on local matter for the last year is accounted for by the increased expenditure ($4,173,336.51) required by the act of August 2, 1882, explained above.

In 1864–'65 the cost per letter for delivery at nine of the principal cities was 1.1 cents each, as against 2.4 mills for delivery and collection of each piece of mail matter in 1882–'83 in one hundred and fifty-four cities, a reduction of 8.6 mills per piece.

Appended to this report, on page —, will be found a tabular statement, marked F, giving, in detail, much information concerning the operations of the free-delivery system during the past fiscal year.

NEEDED LEGISLATION.

LEASES.

Great embarrassment in leasing buildings for post-office use now exists, on account of a lack of well-defined authority to make contracts beyond the fiscal year; or, in other words, in the absence of a special statute, it is deemed best not to bind the Government for a longer term than the fiscal year covered by the appropriation applicable for the payment of rent. This should be remedied without unnecessary delay.

One of the primary objects in making a lease for a term of years, is a minimum rental. This can generally be secured when a reasonable assurance can be given that the rent will be paid for four or more years, but parties having capital to put into buildings for postal purposes will not accept annual leases at low figures. The Government is therefore obliged to pay higher rates than private citizens; and, practically, leases are little more than yearly allowances for rent. In my judgment it will not be advisable to name a specific term of years. Generally the time should be limited to four years, but cases occur where it is in the interest of the Government to make contracts for five, six, and even ten years. I am of the opinion that the Department should have ample discretionary power in the premises; and I so recommend.

MONEY-ORDER CLERK-HIRE.

The endeavor to "divorce" the money-order work from other postal business, under act of Congress approved March 3, 1883, is causing much trouble all over the country and great annoyance to this office, and I am firmly of the opinion that the law should be so amended as to enable the Department to provide for this work in the same manner it now pays for clerical assistance in transacting other postal business; that is, the annual allowance for clerk-hire, as made by this office, should cover the entire cost of the clerical labor required at any and all points. I hope this matter will be brought to the attention of Congress.

OFFICE-RENT AT THIRD-CLASS POST-OFFICES.

In another part of this report (under the head of "leases") I touched upon the subject of the Government paying the office-rent at third-class offices. This is an important matter, as you know, especially to a class of meritorious postmasters. I consider these postmasters, as a class, the most deserving of attention at the present time; and, as I have heretofore said, it is a great hardship to compel them to pay their office expenses. I therefore recommend that provision be made for paying at least the office-rent at offices of this class.

At the proper time a list of these offices, with the salaries of the postmasters, and an estimate of the amount required to pay the rent, can be furnished.

PERCENTAGE OF GROSS RECEIPTS FOR EXPENSES.

The present system of making allowances for expenses at offices of the first and second classes upon the basis of the surplus box-rents and commissions (sections 124 and 125 P. L. and R., edition of 1879) is not adapted to the practical requirements of the postal service of our large and growing country.

Besides, it is not just. An equitable apportionment of allowances cannot be made under an iron-clad construction of the present law. I favor the plan, heretofore suggested, of allowing postmasters at offices of this character a percentage of the gross receipts accruing at their respective offices, to cover the cost of maintaining the postal service thereat. I think these offices should be grouped on the basis of the gross receipts, and rates of percentage fixed on the revenue returned. These rates should be sufficient to provide for the reasonable expenses imposed upon the postmasters at the offices named. I am now collecting data by which I hope in the near future to suggest rates of percentage which will, in my judgment, meet the requirements of the service.

OFFICE FURNITURE.

Under this head (page 17 of this report) it has been shown that the appropriation applicable for the purpose was not large enough to meet the wants of the service. For this reason bills aggregating $6,173.87 were disallowed. If the appropriation would have warranted the expenditure, about $4,500 of the above amount would have been allowed. In addition to the disallowance named, vouchers for safes (see page 17 of this report) in the sum of $5,722 were suspended. And as the postmasters at the offices mentioned in the list were instructed to pay for these safes, provision should be made to reimburse them for the expense incurred. I therefore recommend that a supplementary appropriation of $9,222 be asked for.

STATIONERY.

The appropriation for this purpose was $55,000, being $5,000 less than the estimate.

The expenditures show that this estimate was very close, for, notwithstanding the careful inspection of the accounts, the appropriation was exceeded in the sum of $1,784.05, and bills amounting to $3,172.96 were disallowed, a total sum of $4,929.01 in excess of the amount appropriated.

As most of the accounts disallowed are just, I recommend that not less than $2,500 be asked to reimburse postmasters who have in good faith paid the bills.

In closing this report I desire to bear testimony to the industry and faithfulness with which the different heads of divisions of this office, as well as the employés, have discharged their duties. The chiefs of divisions have rendered me that efficient service to be expected of officers who give diligent attention and careful and constant study to the work devolving upon them. Such subordinate officers, who always have opinions of their own and freely express them without stopping to first consider whether or not the opinions they honestly entertain are those of their superior officer, are the class of officers from whom a

superior gets his best and most valuable assistance. It is from such subordinates that the head of any office gets the most cheerful acquiescence when he assumes the responsibility of final decision which the law places upon him.

I have the honor to be, very respectfully, your obedient servant,

FRANK HATTON,
First Assistant Postmaster-General.

Hon. WALTER Q. GRESHAM,
Postmaster-General.

REPORT OF THE SECOND ASSISTANT POSTMASTER-GENERAL.

POST-OFFICE DEPARTMENT,
OFFICE OF THE SECOND ASSISTANT POSTMASTER-GENERAL,
Washington, D. C., October 24, 1883.

SIR: The cost of inland transportation on the 30th day of June, 1883, was:

For 1,513 railroad routes, aggregating 110,208 miles	$13,887,800
For 115 steamboat routes, aggregating 16,093 miles	607,621
For 11,327 star routes, aggregating 226,865 miles	4,739,478
Total cost	19,234,899

Comparison with the last annual statement shows, for the railroad service, an increase of 124 routes, of 9,645 miles, and of $1,134,616 in annual cost; for the steamboat service an increase of 6 routes, of 659 miles, and of $33,602 in annual cost; for the star service, an increase of 530 routes, a decrease of 754 miles, and of $814,371 in annual cost.

This statement is based upon contract prices and annual salaries, irrespective of fines and deductions; the amounts actually disbursed appear in the report of the Auditor.

The number of contracts drawn in duplicate during the year ended June 30, 1883, was 5,000.

STAR SERVICE.

The rate of expenditure for the star service on June 30, 1883, was $4,739,478, a decrease of $814,371 compared with the cost on June 30, 1882. This rate was increased from July 1, 1883, $252,692, which amount represents the cost of new service that went into operation on that date, and also the increased cost of the service that was relet in Michigan, Wisconsin, Illinois, Iowa, and Minnesota under new contracts from that date. This leaves a net decrease since June 30, 1882, of $561,679.

I have thought it necessary here to present, for permanent record, a comparative statement showing the work of this office affecting the cost of the star service during the latter part of the fiscal year ended June 30, 1881, and during the years ended June 30, 1882, and June 30, 1883, as thereby a large reduction of expense was effected without in any manner curtailing needed mail facilities.

The extension of railroad service contributed temporarily to a portion of the reduction, but this decrease in cost was in great measure

counteracted by the establishment of the new lateral service which became immediately necessary; the result, however, stands as follows:

Years.	Mileage.	Cost.	Decrease.
	Miles.		
June 30, 1880	76, 070, 995	$7, 321, 499	
June 30, 1881	79, 557, 296	6, 957, 355	$364, 144
June 30, 1882	76, 924, 867	5, 553, 849	1, 403, 506
June 30, 1883	77, 998, 782	4, 739, 478	814, 371

Increase in mileage for 1883 over 1880, 1,927,787 miles.
Decrease in cost for 1883 compared with cost for 1880, $2,582,021.

This statement is the more necessary at this time in view of the fact that, having regard to postal requirements, the cost of the star service has reached the lowest point attainable, and that henceforth increased expense is inevitable by reason of the continuous growth of the country and the very rapid settlement of the Western States and Territories.

Complaints have been numerous in relation to the equipment used in the performance of service on the small routes, the means employed being inadequate to secure the proper facilities. These complaints have their origin primarily from the methods employed to secure profits by subletting mail contracts, the margin allowed by the contractor to the subcontractor or carrier being so small that an inferior grade of service naturally results. Restrictions have accordingly been placed upon subletting by means of a form of subcontract, prescribed by regulation, which will, to some extent, increase the cost, obtaining at the same time a much-needed improvement of the service. Under the present laws relating to subcontracts a few contractors have, by certain objectionable practices, seriously interfered with the regular transaction of the business of this office, and in many instances have succeeded in evading their obligations to subcontractors. While these practices need not be designated here, as they are well known, the new subcontract will to some extent prevent them, and aid in the enforcement of the statutes, giving thereby greater security to subcontractors. It is anticipated that such service as may be readvertised within the next eighteen months will be relet at an increase in cost, for the reason that the present rate is regarded as too low. To provide for this increase, and also for an expected larger percentage of new service which will be made necessary during the period indicated, for reasons heretofore stated, I recommend that the sum of $5,600,000 be appropriated for the star service for the fiscal year ending June 30, 1885.

STEAMBOAT SERVICE.

The rate of expenditure for the steamboat service for the year ended June 30, 1883, was $607,621. As in the star service, I present here for permanent record a statement of the reduction of the cost of this service since June 30, 1880:

Cost June 30, 1880	$887, 221	
Cost June 30, 1881	753, 167	Decrease, $134, 054
Cost June 30, 1882	574, 019	Decrease, 179, 148
Cost June 30, 1883	607, 621	Increase, 33, 602

Making a net decrease from about May 1, 1881, to June 30, 1883, of $279,600.

I think that for the fiscal year ending June 30, 1885, the sum of

$625,000 should be appropriated in order to provide for any new and permanent service that may be found necessary, and to meet any emergencies that may temporarily arise from the overflow of rivers in the Southern States.

LEGISLATION.

The recommendations of this office that sections 3953 and 3961 of the Revised Statutes, and the proviso of the second section of the act of April 7, 1880, should be repealed have not been acted upon by Congress. The first section requires the deposit of certified checks with proposals for carrying the mails. This section operates to restrict competition, and at the same time affords but little additional security. The second section and the proviso of the act of April 7, 1880, prescribe an impracticable and, as has been demonstrated, an unsafe method for determining the allowances for expedition in carrying the mails on star routes. I have urged a substitute for the latter statutes that directs readvertisement in the very few cases that require expedition. These recommendations are renewed, and I desire further to invite your attention to the necessity for additional legislation respecting the disqualification of bidders for mail service.

The only statutes now in force disqualifying bidders are sections 3949 and 3950 of the Revised Statutes, the first permitting the rejection of the proposal of a bidder who has willfully or negligently failed to perform a former contract; the second excluding any person for five years for the first offense of entering into a combination to prevent the making of any bid, and for the second a continuous disqualification. To these offenses should be added, within the discretion of the Postmaster-General according to the evidence before him, disqualification for imposing or aiding to impose upon the Post-Office Department insufficient bonds upon any proposal or contract for carrying the mail, or for making a false statement to any postmaster to secure a certificate to the sufficiency of the sureties upon any such proposal or contract, or for making or filing, or aiding in making or filing, any false statement in relation to any post-route, or service thereon, with the intent thereby to defraud or cause loss to the United States.

MAIL MESSENGERS.

The estimate for mail messengers for the fiscal year ended June 30, 1883, made in my report for the year 1882, was $800,000, and this sum was appropriated. The rate of expenditure on June 30, 1883, was $803,338, reduced, however, to an amount within the appropriation by deductions of pay for lapses and failures in a number of cases.

By the reduction of the rate of letter postage, and the simultaneous increase of compensation of postmasters at post-offices of the fourth class, and the consequent inability of the larger number of postmasters to pay these employés monthly out of the proceeds of their offices, an order was made to pay them quarterly by warrants upon the Treasury.

The change from monthly to quarterly payments precipitated a large number of resignations, and a compulsory readvertisement of the service, thereby causing increased expense. This method of payment increases the cost in nearly every case, as the messengers are unwilling to wait three months for their earnings without greater compensation. The rapid growth of the railway service has added largely to the expense of this service, so that the average cost of new service during the

last four months has been at the rate of $100,000 per annum. This rate of expenditure will make necessary a deficiency appropriation of $75,000 for the current year, and an appropriation for the fiscal year ending June 30, 1885, of $1,100,000.

FINES AND DEDUCTIONS.

The amount of fines and deductions from all branches of the service for the year ended June 30, 1883, was $214,992.70, and the remissions for the same period amounted to $21,475.77, leaving the net amount of fines and deductions for the year $193,516.93. (See table marked F.)

MAIL EQUIPMENTS.

During the year ended June 30, 1883, $199,489.04 was expended for mail bags and mail catchers, including repairs and mail-bag labels and label cases, the appropriation therefor being $200,000.

The appended table (marked O) shows a detailed statement of such expenditure. By reference to that table it will be seen that the total number of mail bags of every description purchased amounted to 130,000, of which 15,000 were locked pouches for letters and other mailable matter of the first class, and 111,500 were mail sacks for printed and other mailable matter included in the second, third, and fourth classes; that $45,212.53 was expended for repairs (the total number of mail bags repaired being 529,320), and $4,938.75 for mail catchers, including repairs.

Mail bags, from their peculiar and distinctive character of manufacture, necessarily consume considerable time for making. Their material, whether leather or canvas, being manufactured, as it is, for that purpose and no other, they are not to be had at any time and in any desired quantity already made, as if they were common commodities in the market, but can only be procured some months after previous orders for their manufacture and delivery. Hence a suitable surplus or reserve stock, made in advance of immediate wants, was hitherto prudently kept collected at depositories convenient for speedy distribution, when drawn upon by requisitions from the Department to promptly supply all sudden emergencies and immediate requirements of the service. But the appropriations made in the last few years for mail bags proved to be inadequate to replace the continual reduction from wear, tear, and decay, and at the same time supply the rapidly-increasing demands occasioned by the unceasing and extensive growth of the service, especially on railways, without depleting the reserved stock. The speedy replenishing and future maintenance of such reserved stock, now almost exhausted, is a necessity which will require an appropriation for mail bags and mail catchers for the ensuing year, exceeding that of the current year, the amount of which being $220,000.

The continually increasing quantities of documents, blanks, blank books, and official supplies sent daily from the several executive departments to different and often distant places in the United States, besides the public documents sent from the Capitol, contribute in no small degree to the growing demands for canvas mail bags, and to their wear, tear, and destruction. By reference to the appended table (marked P) it will be seen that $24,999.52 were expended for mail locks and keys during the year ended June 30, 1883, the appropriation for the same being $25,000.

During the year all postmasters and postal clerks were furnished with keys, safety chains, and full instructions for the new general mail locks which went into use on September 1, 1883, simultaneously throughout the postal service, in place of all the old locks withdrawn as unfit for further use. Accompanied herewith is a tabular statement (marked N) of all contracts for mail equipments in operation on the 30th of June, 1883.

It is estimated that for the year ending June 30, 1885, the following amounts will be necessary for expenditure:

For mail bags and mail catchers	$250,000
For mail locks and keys	25,000

CLERICAL FORCE.

In my preceding report and estimates an addition to the clerical force of this office was not asked for, because I believed that the work could be performed up to June 30, 1884, with the present quota.

On account of the increase of business I am obliged to request that the following additional clerks be furnished: One clerk of class four, who, in addition to his other duties, shall have charge of the library; one clerk of class three; two clerks of class two; two clerks of class one, and one assistant messenger, at $600 per annum.

The importance of the duties required of the principal clerk in charge of the division of mail equipments justifies the recommendation that he be designated as chief of the division of mail equipments, at a salary of $2,000 per annum. If this recommendation is adopted, one clerk of class four can be dispensed with.

RAILROAD SERVICE.

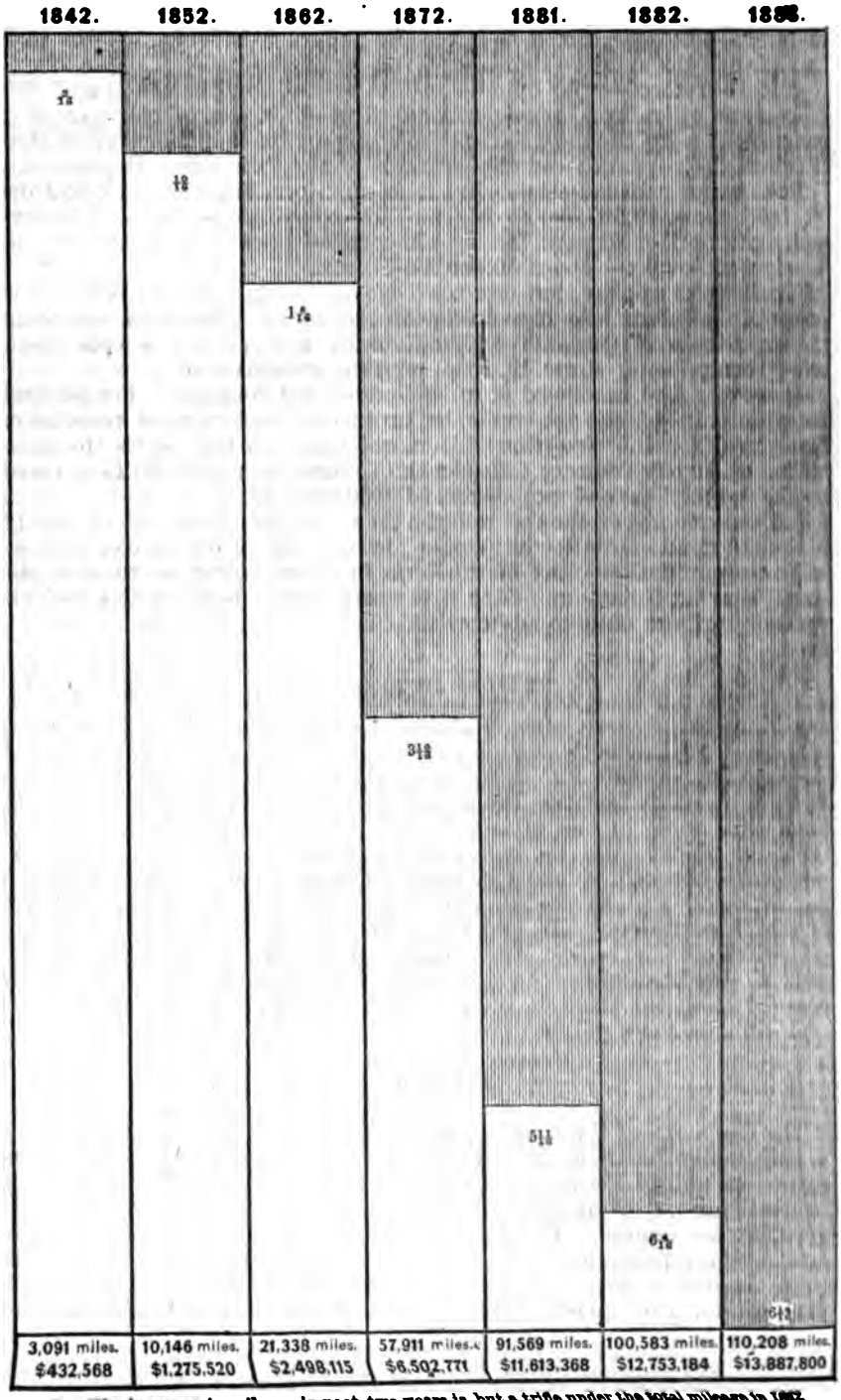
The most potent factor in the phenomenal development of the vast resources of the United States is the railroad system. It has released the great wealth of the mountain-locked regions, and brought to market the already immense and growing productions of the broad and fertile prairies of the great West, thus making these sections of the country desirable and profitable fields for the employment of energy and capital.

The railroad system was inaugurated in 1830, with a span of 23 miles; it has grown for the subsequent decades with the population of the country. From 1830, at an increase of 281 miles per annum, to 2,818 miles in 1840; from 1840, at an increase of 620 miles per annum, to 9,021 miles in 1850; from 1850, at an increase of 2,142 miles per annum, to 30,635 miles in 1860; from 1860, at an increase of 2,227 miles per annum, to 52,914 miles in 1870; from 1870, at an increase of 4,075 miles per annum, to 93,761 miles in 1880; and from 1880, at an increase of 10,000 miles per annum, to 123,671 miles in 1883.

The use of the system for the transportation of the mails has been nearly equal to its mileage; and the cost of such service now constitutes about one-third of the total expenditure of the Post-Office Department. At first sight it might appear that there was growing up a *very expensive* branch of the postal service, constantly ramifying, adding to its cost, and eating up the largest share of the postal revenues. But we must keep in mind the fact that it is the extension of the railroad system that is the very cause, in great part, of the increased revenue of the Department. And what is more significant is this further fact that an examination of the figures herewith presented will reveal that there

CHART SHOWING THE RATE OF INCREASE IN THE RAILWAY SERVICE, AND COST OF THE SAME.

[Scale $\frac{1}{8}$ inch to 1,000 miles.]



N. B.—The increase in mileage in past two years is but a trifle under the total mileage in 1862.

nas been no material proportionate increase. Indeed, considering the volume of the mails, and greatly increased facilities provided, there has been an actual diminution in the cost of railroad service as compared with the revenues of the Department. The situation may be clearly understood by reference to the preceding chart, from which may be seen at a glance the relative increase of the service and cost.

It is therefore worthy of note in this connection that the rapid displacement by railroad transportation of other modes of conveyance is concurrent with the most satisfactory proportion that has ever existed between the revenues and expenditures of the Post Office Department.

The cost of railroad service has increased from June 30, 1879, to June 30, 1883, from $9,567,590 to $13,888,799—about 45 per cent. The revenues of the Department for the same period grew from $30,041,982 to nearly $45,500,000—about 50 per cent.

It will thus appear that increased use of the railroads for postal purposes is consistent with increased postal revenues. Therefore, accepting the experience of the past as a guide to the future, it may be concluded, other things being equal, that the relative proportion of increased railroad service and increased postal revenues will continue. For general but almost indefinite governmental protection society must respond in taxes, and for the assertion of personal rights in the courts the individual must pay roundly. But in the superior postal facilities enjoyed by the widely spread population of this country at so small a cost is found the one governmental relation in which the citizen is constantly reminded that a great establishment is maintained for his convenience and interest without any sacrifice on his part. And so viewing the postal service, I have extended it to every point where needed, and exercised vigilant care to advance its efficiency and increase its usefulness.

The railroad service now aggregates 109,827 miles, of which 24,500 miles, or 20 per cent., has been established since June 30, 1880. The increase for these three years is greater than the total railroad service in operation on the 30th of June, 1858, the close of the first 28 years of the system. These data show not only the enormous growth of the service, but also indicate the great care and responsibility devolving upon this office in the arrangement of the routes, the adjustment of the rates of pay, and the conduct of the business incident to the expenditure, through so many channels, of more than a million dollars a month, or, as already stated, about one-third of the total expenditures of the Department. The items for which this expenditure is made are given in detail in table. The complete publicity thus given to the details of this business is the outgrowth of a sentiment prevalent in this country as to the right of the people to a full knowledge of all transactions affecting the public welfare.

PACIFIC ROADS.

The decisions of the courts, and the First Comptroller relinquishing to the Pacific Railroad companies operating subsidized lines all sums earned on subsidized lines leased or operated by them, requires a direct expenditure out of the appropriation for railroad transportation of over $600,000 per annum. This item has been particularly explained in the late annual reports, but was not included in the estimates; consequently these decisions carry with them the necessity for an additional appropriation for the current fiscal year, 1884, and also constitute an im-

portant element of cost to be provided for in the estimates and appropriation for 1885.

STATEMENT.

First. Cost of transportation on all routes, on which rates have been fixed, to June 30, 1883, by Post-Office Department books	$12,288,799
Cost June 30, 1882	11,297,333
Increase for 1883 over 1882	$991,466
Rate of increase, 8.77 per cent.	
New routes June 30, 1883, unadjusted, 7,234 miles.	
Second. Cost June 30, 1883	$12,288,799
Estimated on 7,234 miles	225,000
	$12,513,799
Less amount earned by and withheld from Pacific roads indebted to the United States	823,748
Total	$11,690,051
This total represents the cost for which direct *payment* must be made.	
Third. Appropriation for 1884	$11,725,000
Cost June 30, 1883	11,690,051
Excess available for increased service for 1884	$34,949
Fourth. Cost, Auditor's statement:	
To June 30, 1883, paid $11,579,172.66; unpaid, $423,992.92	$11,579,172 66
Cost June 30, 1882	10,286,085 00
Increase for 1883 over 1882	$1,293,087 66
Rate of increase, 12.57 per cent.	

ESTIMATES.

The increase in length of routes for the year ending June 30, 1883, was 9,264 miles, or 9 per cent. more than the mileage June 30, 1882, and the system continues to expand in about the same proportion. The total increase for the three years ending June 30, 1883, reaches the enormous result of 24,500 miles, about equal to the circumference of the world. It should be borne in mind that this unprecedented extension of the service represents a corresponding distribution of population, and tends to greatly increase correspondence and consequently the postal revenue. By the decisions mentioned the actual cost is not increased as the sum involved was placed to the credit of the companies indebted to the United States. Now, however, such earnings are to be *paid* to the companies, and must therefore be considered and provided for in the estimate and appropriation.

1884.

It is clear therefore that the $11,725,000 provided for the current year is insufficient, being but about the cost on June 30, 1883. Adding thereto 8 per cent. (or $935,200) for extension of routes and expansion of service on old routes, and $12,625,200 is reached, which is the amount that will probably be required for the current year.

ESTIMATE FOR 1885.

Accepting $12,625,200 as the proper basis, being in accordance with the experience of recent years as to the growth of the service and cost, and allowing for the usual increase at 8 per cent. and the amount re-

quired for the fiscal year ending June 30, 1885, will be $13,735,216, or $1,010,016 more than the amount that will probably be required for the current year.

RAILWAY POST-OFFICE CARS.

The appropriation for the current year for railway post-office cars is $1,575,000.

The cost of the service on the 30th June, 1883, was at the rate of $1,599,001 per annum. It is believed that the present service can be maintained and such additional service provided as may become necessary during the ensuing fiscal year for the sum of $1,625,000, which is but $50,000, or about 3 per cent. more than the appropriation for the current year.

SPECIAL FACILITIES.

The cost of "special facilities" on railroad routes for the year ending June 30, 1883, was $185,000, and a like amount is appropriated for the current year. The results secured by this expenditure are very highly appreciated by the communities interested, and I therefore recommend that a like sum be appropriated for 1885.

LAWS RELATING TO RAILROADS.

In my previous reports I have briefly alluded to the insufficiency of the present laws to meet the requirements of the public interests with regard to the transportation of mails on railroad routes. Congress, acting upon the suggestion so made, provided for a revision of the system. And the Postmaster-General in March last appointed a committee, of which I am chairman, to conduct the work incident to the proposed change.

It is hoped that the committee will be able to submit its report to you at an early day, in which will be found a comprehensive expression of my views on this subject.

Very respectfully,

RICHARD A. ELMER,
Second Assistant Postmaster-General.

Hon. W. Q. GRESHAM,
Postmaster-General.

ADDENDUM.

Table A exhibits cost, appropriation, and estimates.

Table B shows length of routes, annual transportation, and cost in the several classes of inland mail service.

Table C is a statement of the railway mail service.

Table D is a statement of the steamboat service.

Table E shows the increase and decrease in transportation and cost.

Table F is a statement of deductions, fines, and remissions.

Table G shows weight of mails, speed and accommodations for mails, and agents on railroad routes, with an index.

Table H shows the readjustment of pay on railroad routes; with an index.

Table I shows the rate of pay for railway post-office cars, with increase and decrease since last annual report.

Table K states expenditures for necessary and special facilities on trunk lines.

Table L is a statement of railroad service established since last annual report.

Table M shows the growth of railway mail service from 1836 to 1883.

Table N is a statement of all contracts for mail equipments and use of patents.

Table O is a statement of expenditures for certain mail equipments.

Table P is a statement of expenditures for mail locks and keys.

REPORT OF THE THIRD ASSISTANT POSTMASTER-GENERAL.

POST-OFFICE DEPARTMENT,
OFFICE OF THIRD ASSISTANT POSTMASTER-GENERAL,
Washington, D. C., November 8, 1883.

SIR: I have the honor to submit the following report and accompanying tables, numbered from 1 to 20, inclusive, pertaining to the business of this office for the fiscal year ended June 30, 1883, viz:

No. 1. Explanation of estimates of appropriations for the office of the Third Assistant Postmaster-General for the fiscal year ending June 30, 1885.

No. 2. Statement exhibiting the receipts and expenditures, under appropriate heads, by quarters, for the fiscal year ended June 30, 1883, compared with the fiscal year ended June 30, 1882.

No. 3. Statement showing itemized appropriations for the service of the Post-Office Department for the fiscal year ended June 30, 1883, and the expenditures made out of the same.

No. 4. Statement showing receipts and disbursements at Treasury depositories during the fiscal year ended June 30, 1883.

No. 5. Statement showing the issue in detail of all the several kinds of adhesive postage-stamps, stamped envelopes, and postal cards for the fiscal year ended June 30, 1883.

No. 6. Statement showing separately the issues of official postage-stamps for the fiscal year ended June 30, 1883.

No. 7. Statement showing the issues of postage-stamps, stamped envelopes, newspaper wrappers, and postal cards, by denominations, for the fiscal year ended June 30, 1883.

No. 8. Statement showing the increase in the number and value of postage-stamps, stamped envelopes, and postal cards issued for the year ended June 30, 1883, over those of the preceding year.

No. 9. Statement showing amount of dead mail matter treated in the division of dead letters during the year ended June 30, 1883.

No. 10. Statement showing the disposition of mail matter opened in the division of dead letters during the year ended June 30, 1883.

No. 11. Statement showing number of pieces, classification, and disposition of unmailable matter received at the dead-letter office during the fiscal year ended June 30, 1883.

No. 12. Statement showing the number of foreign dead letters received and disposed of during the year ended June 30, 1883.

No. 13. Statement showing the number of letters originating in the United States and returned by foreign countries as undeliverable during the year ended June 30, 1883.

No. 14. Statement showing the number of pieces of dead mail matter

returned to and received from foreign countries during the year ended June 30, 1883.

No. 15. Statement of held-for-postage matter received and disposed of at free-delivery offices during the year ended June 30, 1883.

No. 16. Statement showing the number, classification, and disposition of dead registered letters during the year ended June 30, 1883.

No. 17. Statement showing the number of registered letters and parcels transmitted through the mails from each State and Territory in the United States during the year ended June 30, 1883.

No. 18. Statement showing the number and value of registered letters and packages forwarded for the Post-Office and Treasury Departments during the year ended June 30, 1883.

No. 19. Statement showing the increase or registered letters and parcels upon which fees were collected at twenty-five of the leading cities during the fiscal year ended June 30, 1883, over the preceding year.

No. 20. Statement showing the operations of the registry system at the cities of New York, Philadelphia, Chicago, Saint Louis, and Washington during the fiscal year ended June 30, 1883.

APPROPRIATIONS, EXPENDITURES, AND ESTIMATES FOR THE SERVICE OF THIS OFFICE.

The expenditures and liabilities for the service of this office for the last fiscal year amounted to $936,166.88, including the sum of $3,895.63 not yet paid on account of the insufficiency of the appropriation for the manufacture of adhesive postage-stamps. The increase over the expenditures of the previous year was only $26,184.85, or 2.8 per cent. This slight increase, in face of the much larger increase in the quantity of supplies furnished, was due mainly to a new contract for stamped envelopes entered into to take effect October 1, 1882, at a considerable reduction of prices. The total appropriations for the year amounted to $1,043,900, being $107,733.12, or 11.5 per cent., more than the total expenditures and liabilities. The estimates for the fiscal year ending June 30, 1885, aggregate $1,234,400, being only $43,500, or 3.6 per cent., in excess of the appropriations for the current fiscal year. The estimates in detail, with the explanations thereof, will be found in paper marked No. 1, accompanying this report.

FINANCIAL OPERATIONS OF THE DEPARTMENT.

The receipts and expenditures of the postal service during the fiscal year ended June 30, 1883, were as follows:

Receipts:	
Letter postage paid in money	$146,219 35
Box-rents	1,882,064 91
Fines and penalties	9,752 24
Sales of postage-stamps, stamped envelopes, newspaper wrappers, and postal cards	43,014,043 58
Dead letters for which no claimants could be found	12,279 83
Net revenue from money order-business	411,619 37
Miscellaneous	32,713 33
Total	45,508,692 61
The disbursements on account of the service of the year were	42,816,700 56
Excess of receipts over disbursements	2,691,992 05

The unpaid indebtedness of the year is estimated at $775,000. The amount certified to the Register of the Treasury by the Auditor for mail transportation on the Pacific Railroads for the year, and not charged to the appropriations for the postal service, was $915,710.22. Deducting these two sums from the excess of receipts shown would leave the estimated net surplus of receipts over the estimated total cost of the postal service for the year at $1,001,281.83.

The increase in the several items of postal revenue is shown in the following table:

Items.	Fiscal year 1882.	Fiscal year 1883.	Increase.	
			Amount.	Per cent.
Letter postage paid in money	$97,585 32	$146,219 35	$48,634 03	49.8
Box-rents	1,652,132 21	1,882,064 91	229,932 70	13.9
Fines and penalties	20,426 99	9,752 24	*10,674 75	*52.2
Sales of postage-stamps, stamped envelopes, newspaper wrappers, and postal cards	39,708,357 00	43,014,043 58	3,310,686 58	8.3
Dead letters for which no claimants could be found	7,657 63	12,279 83	4,622 20	60.3
Net revenue from money-order business	360,767 35	411,619 37	50,852 02	14.0
Miscellaneous	34,483 65	32,713 33	*1,770 32	*5.1
Total	41,876,410 15	45,508,692 61	3,632,282 46	8.6

*Decrease.

The increase in the gross receipts, as above exhibited, was $3,632,282.46, or 8.6 per cent. It would have been much greater but for the act of March 3, 1883, reducing letter postage to two cents. Though the law did not go into operation till the 1st October, there was a noticeable diminution in the sale of stamps from the time two-cent postage was recommended to Congress by the President, in his annual message, last December. Thus the increase for the first half of the fiscal year, to December 31, was 9.5 per cent., while for the latter half, to June 30, it was only 7.8 per cent., over corresponding periods of the previous fiscal year. The effect in the way of diminished sales was still more noticeable during the quarter ended September 30, the period immediately preceding the reduction of postage. It did not, of course, indicate that there was a falling off in the volume of postal business transacted, but merely that the supply of stamps outstanding in the hands of the public was being reduced in anticipation of the change of postal rates.

The disbursements for the service of the fiscal year, as before shown, were $42,816,700.56, in addition to which the sum of $466,243.87 was paid on account of indebtedness of previous years, making the total amount expended during the year $43,282,944.43.

Table No. 2, accompanying this report, contains a detailed statement, by quarters, of the receipts and expenditures for the fiscal year ended June 30, 1883, with a comparison of the same with the preceding year.

In Table No. 3 will be found the appropriations and expenditures, by items, for the service of the fiscal year. The appropriations aggregate the sum of $44,876,600.18. In 34 items the unexpended balances amounted to $3,575,490.83, and in 3 items the expenditures were $1,515,591.21 in excess of the appropriations. The net amount of unexpended balances was therefore $2,059,899.62, subject to reductions when the final indebtedness of the year shall have been ascertained and paid.

In the item of compensation of postmasters the expenditure was $1,515,394.46 in excess of the appropriation. This was occasioned in part by the operation of the act of Congress of March 3, 1883, to regu-

late the salaries of postmasters. This act was designed to equalize the pay of postmasters under the reduction of letter postage from three cents to two cents, the postmasters at the smaller offices being compensated by commissions on the amount of stamps canceled. The act allowed a more liberal scale of commissions, but, so far as the small offices were concerned, it was made to take effect on the date of its passage, March 3, instead of on the 1st October, when the reduction of postage took place. The result was to largely increase the expenditure for pay of postmasters for the intervening time that the three-cent letter rate continued to exist. This fact, apparent enough in itself, is rendered strikingly manifest upon an examination of the figures. For the six months ended December 31, 21.3 per cent. of the gross postal receipts was expended for pay of postmasters, while for the six months ended June 30 it required 24.3 per cent. of the receipts for that purpose. The receipts for the six months ended June 30 amounted to $23,063,093.51, of which 3 per cent., or $691,892.80, would accordingly represent the additional compensation allowed to postmasters from March 3 to June 30 by the act referred to. This increased expenditure contributed, with the diminished sales of stamps, before explained, to reduce the surplus receipts for the last fiscal year. The expenditure is made under the operation of law, postmasters being authorized to retain their compensation before turning over the surplus receipts of their offices to the government.

The amount expended for railroad transportation for the year was $11,155,179.74, or $179.74 in excess of the appropriation. To the amount already expended must be added $423,992.92, found due on accounts that have been suspended to await an appropriation, and an estimated indebtedness of $225,000 for new service that has not yet been reported for payment. The total estimated cost of railroad transportation for the year was, therefore, $11,804,172.66, exclusive of $915,710.22 credited to the Pacific Railroads on the books of the Treasury, under the act of March 3, 1879. The act was formerly held to apply also to the branch and leased lines of the Pacific Railway companies, but this construction has recently been reversed by the courts, leaving payment for mail service on such branch and leased lines to be made out of the regular appropriations for the transportation of the mails. It is estimated that the amount covered by this decision will reach $500,000 for the service of the last year, $452,567.23 of the same having already been ascertained.

The expenditure for ship, steamboat, and way letters was $17.01 in excess of the appropriation. The appropriation for the manufacture of adhesive postage-stamps fell $3,895.63 short of the amount required for that purpose; but the contractors for furnishing the stamps are left to await an appropriation by Congress to cover the deficiency. In some other items deficiencies for small amounts will be found when all the accounts for the year shall have been rendered and audited.

MAIL TRANSPORTATION ON PACIFIC RAILROADS.

The total amount certified by the Auditor to the Register of the Treasury under the act of March 3, 1879, for transportation of the mails on certain Pacific railroads, was $915,868.29, of which $915,710.22 was for the service of the year ended June 30, 1883, and $158.07 was for the service of previous years. These sums are credited to the railroad companies, and under the law are not classed among the expenditures of the Post-Office Department.

AMOUNT DRAWN FROM THE TREASURY.

The act of Congress of March 3, 1883 (22 Stat., page 599), appropriated $15,824.06 to supply deficiences for 1880 and prior years, and this was the only sum drawn from the Treasury during the year.

APPROPRIATIONS TO SUPPLY DEFICIENCIES IN POSTAL REVENUES.

The amount appropriated by Congress from the general Treasury to supply anticipated deficiencies in the postal revenue for the year ended June 30, 1883, was $1,902,177.90, and for the year ended June 30, 1882, it was $2,152,258. These sums remain untouched in the Treasury, the postal revenues for both years having been found adequate to defray all the expenses, and leave a surplus besides.

BAD DEBTS.

As will appear by the report of the Auditor, the postal revenue was charged during the last year with the following:

Amount of bad debts	$38,039 43
Amount of balances compromised	1,623 65
	39,663 08
Less amounts of credits on suspended accounts	860 26
Balance	38,802 82

Of this amount $36,598.49 accrued between 1856 and 1871, the suspended accounts for that period having been reviewed and finally closed by the Auditor during the past year. The whole amount, however, constitutes a charge against the postal revenue for the year ended June 30, 1883.

TRANSACTIONS AT DEPOSITORIES.

The receipts and disbursements at Treasury depositories during the last fiscal year may be briefly stated as follows:

Balance subject to draft June 30, 1882	$5,735,845 39
Add ante-bellum accounts	40,078 06
	5,775,923 45
Amount of outstanding warrants June 30, 1882	80,160 46
Aggregate deposits during the year ended June 30, 1883	22,950,428 26
Total	28,806,512 17
Amount of warrants paid during the year ended June 30, 1883	20,215,443 86
Balance at depositories June 30, 1883	8,591,068 31
Amount of outstanding warrants June 30, 1883	107,232 92
Balance subject to draft June 30, 1883	8,483,835 39

Table No. 4 will show the transactions at these depositories in detail.

CONTRACTS ENTERED AND ACCOUNTS KEPT.

During the year there were 3,601 contracts for mail service received from the Second Assistant Postmaster-General, and 18,353 orders of the Postmaster-General (of which 9,176 were double) recognizing mail service not under contract, curtailing or extending service, or modifying previous orders. These contracts and orders were entered upon the books of the finance division for reference when acting upon certificates of the Auditor for the payment of mail contractors and other creditors of the Department. The number of such certificates received and acted

upon during the year was 48,278, an increase of 2,741 over the previous year.

Accounts were kept with the Treasury, nine sub-treasuries, and thirty-six designated depositories, involving the sum of $22,934,604.20, against which 48,278 warrants were issued, aggregating $20,242,516.32.

In addition to the above, 5,323 certificates were received from the Auditor for the Post-Office Department, upon which 5,323 transfer drafts, covering the sum of $614,169.31, were drawn against postmasters having a surplus of postal revenue, in favor of other postmasters whose revenues were insufficient to meet the demands upon their offices for payment of route-agents, railway postal clerks, mail messengers, and letter carriers.

The following table will show the number of warrants and transfer drafts drawn in the finance division, and the number of certificates of deposit received, entered, and passed to the Auditor during the fiscal year:

	Fiscal year of 1882.	Fiscal year of 1883.	Increase.
Number of warrants	38,851	48,278	9,427
Number of drafts	4,768	5,323	555
Number of certificates of deposit	190,799	199,564	8,765
Total	234,418	253,165	18,747

The system of paying mail messengers by postmasters was discontinued on the 30th of June, 1883, by order of the Postmaster-General, and since that date payment has been made direct by the Department by warrants on the several assistant treasurers of the United States. For the current fiscal year the number of additional warrants that will be drawn in consequence of this change is estimated at 32,000, or an average of 8,000 per quarter.

DIVISION OF POSTAGE-STAMPS, STAMPED ENVELOPES, AND POSTAL CARDS.

The following is a summary of the operations of the stamp division during the fiscal year ended June 30, 1883: The number of ordinary postage-stamps issued for sale to the public was 1,202,743,800, valued at $30,307,179; of newspaper and periodical stamps 2,207,939, valued at $1,752,564.50; of stamped envelopes, plain, 114,251,950, valued at $2,831,096.87; of stamped envelopes bearing a printed return request 100,578,250, valued at $3,129,774.15; of newspaper wrappers 44,436,250, valued at $530,188.75; of postage-due stamps 12,609,900, valued at $404,915.90; of postal cards 379,516,750, valued at $3,796,090; of official stamps issued to Executive Departments for official use 2,575,830, valued at $125,839.20; and of official stamped envelopes and wrappers 2,769,000, valued at $32,671.20; making a total number of 1,861,689,669, and a total value of $42,910,319.57. The issues are more detailed in tables No. 5 to No. 8 appended hereto.

The increase in value of issues over those of the preceding year is as follows: Of ordinary postage-stamps $1,627,651, or 5.64 per cent.; of newspaper and periodical stamps $150,494.80, or 9.39 per cent.; of newspaper wrappers $29,979.95, or 5.99 per cent.; of postage-due stamps $52,745.90, or 14.97 per cent.; of postal cards $280,075, or 7.96 per cent.; of official stamped envelopes and wrappers $3,364.70, or 11.47 per cent.

There was a decrease in the issue of plain stamped envelopes

amounting to $163,771.95, and of stamped envelopes bearing a return request amounting to $34,120.70.

The total increase in the value of all issues was $1,932,266.15, or 4.71 per cent.

In addition to the articles before enumerated, there were issued for official use 9,097,795 registered package envelopes; 811,800 tag envelopes for registered parcels; 25,632,600 post-office envelopes; 1,282,000 envelopes for returning dead letters; 816,500 departmental envelopes for the several bureaus of this Department; and 2,357 newspaper and periodical receipt books.

The requisitions upon which the foregoing supplies were issued numbered as follows:

For ordinary postage-stamps	137,672
For postage-due stamps	14,360
For newspaper and periodical stamps	11,214
For stamped envelopes, plain	63,753
For stamped envelopes, printed	78,617
For postal-cards	80,692
For official postage-stamps and stamped envelopes	31
For registered package envelopes	55,370
For tag envelopes for registered parcels	1,395
For post-office envelopes	25,752
For newspaper and periodical receipt books	1,611
Total	470,457

These supplies were made up and forwarded in the following number of parcels:

Of ordinary postage-stamps	141,318
Of postage-due stamps	14,348
Of newspaper and periodical stamps	9,447
Of stamped envelopes, plain	90,443
Of stamped envelopes, printed	71,832
Of postal cards	87,801
Of official postage-stamps	34
Of official stamped envelopes	101
Of tag envelopes	902
Of registered package envelopes	58,666
Of post-office envelopes	33,230
Of newspaper and periodical receipt books	2,327
Total	510,449

The following is a comparative statement of requisitions filled during the past and preceding fiscal years:

Articles.	Requisitions filled during fiscal year ended June 30, 1883.	Requisitions filled during fiscal year ended June 30, 1882.	Increase.
For ordinary postage-stamps	137,672	135,530	2,142
For postage-due stamps	14,360	13,689	761
For newspaper and periodical stamps	11,214	10,840	374
For stamped envelopes, plain	63,753	64,400	*647
For stamped envelopes, printed	78,617	79,322	*705
For postal cards	80,692	78,431	2,261
For official postage-stamps and stamped envelopes	31	29	2
For registered package envelopes	55,370	54,754	616
For tag envelopes	1,395	1,370	25
For post-office envelopes	25,752	24,802	950
For newspaper and periodical receipt-books	1,611	1,543	68
Total	470,457	464,710	5,747

*Decrease.

POSTAGE ON SECOND-CLASS MATTER.

The weight of newspaper and periodical (second-class) matter mailed during the year from regular offices of publication and from news agencies, not including free circulation within the county of publication, was 85,258,876 pounds, or $42{,}629\frac{876}{2000}$ tons, the postage on which was $1,705,177.53, an increase of $140,074.25, or 9.01 per cent., over the amount of postage collected on such matter during the preceding year.

The number of post-offices at which this class of matter was mailed during the year is 5,349, an increase of 269, or 5.3 per cent., over that of the previous year.

During the year examinations were made of the stubs in 21,615 receipt-books, and 20,090 quarterly statements of collections of newspaper and periodical postage were examined and recorded. The sum of $2,009.47 was collected at proper rates from publishers and news agents on matter mailed, but not entitled to go as second-class matter.

In the following statement will be found the number of pounds of newspapers and periodicals mailed during the year, and the amount of postage collected thereon, at sixteen of the principal post-offices in the United States:

Post-office at—	Year ended June 30, 1882.		Year ended June 30, 1883.		Increase for 1883.			Percentage of total amount collected in the United States.
	No. of pounds of matter.	Amount of postage collected.	No. of pounds of matter.	Amount of postage collected.	In number of pounds.	In amount of postage.	Percentage of increase.	
New York, N. Y.	21,279,330	$425,586 60	22,541,783	$450,835 66	1,262,453	$25,249 06	5.9	26.4
Chicago, Ill.	7,761,695	155,233 90	7,134,851	142,697 02	*626,844	*12,536 88	.....	8.37
Boston, Mass.	4,819,700	96,394 00	5,564,776	111,295 32	745,066	14,901 32	15.5	6.5
Philadelphia, Pa.	4,228,539	84,570 78	4,431,385	88,627 70	202,846	4,056 92	4.8	5.2
Saint Louis, Mo.	3,472,243	69,444 86	3,895,771	77,915 42	423,528	8,470 56	12.2	4.57
Cincinnati, Ohio	2,786,318	55,726 26	3,143,368	62,867 36	357,055	7,141 10	12.8	3.7
Augusta, Me.	2,572,055	51,441 10	1,206,254	24,125 08	*1,365,801	*27,316 02	.....	1.42
San Francisco, Cal.	1,346,873	26,937 46	1,536,372	30,727 44	189,499	3,789 98	14.0	1.8
Detroit, Mich.	1,133,707	22,674 14	1,223,460	24,469 20	89,753	1,795 06	7.9	1.43
Milwaukee, Wis.	965,201	19,304 02	1,182,119	23,642 38	216,918	4,338 36	22.4	1.39
Louisville, Ky.	956,564	19,131 28	1,076,839	21,536 78	120,275	2,405 50	12.6	1.26
Cleveland, Ohio	779,541	15,590 82	1,103,449	22,068 98	323,908	6,478 16	41.5	1.3
Pittsburgh, Pa.	793,918	15,878 36	892,556	17,851 12	98,638	1,972 76	12.4	1.05
Saint Paul, Minn.	751,243	15,024 86	915,409	18,308 18	164,166	3,283 32	21.9	1.07
Toledo, Ohio.	716,472	14,329 44	772,764	15,455 28	56,292	1,125 84	7.9	.90
Baltimore, Md.	674,816	13,496 32	739,945	14,798 90	65,129	1,302 58	9.6	.87
Total	55,038,210	1,100,764 20	57,361,091	1,147,221 82	2,322,881	46,457 62	4.2	67.28

*Decrease.

DIVISION OF DEAD LETTERS.

The whole number of pieces of undelivered mail matter (including 61,424 remaining on hand from the previous year) received in the dead-letter office was 4,440,822. They were classified as follows:

Domestic mailed letters, including 3,246,892 ordinary unclaimed letters, 78,865 letters returned from hotels, 13,507 letters bearing fictitious addresses, 133,509 letters returned from foreign countries, and 3,749 registered letters	3,476,522
Domestic unmailable letters, comprising 181,584 held-for-postage letters, 1,341 letters containing unmailable articles, 280,137 misdirected letters, and 11,979 letters without address	475,045
Domestic parcels of third and fourth class matter	63,947
Letters mailed in foreign countries	405,348
Printed matter, samples, &c., mailed in foreign countries and returnable	19,960
Total, as before	**4,440,822**

The following was the disposition primarily of letters handled during the year:

Domestic mailed letters:		
Card and request letters delivered unopened	49,730	
Letters opened	3,154,892	
Letters left on hand	271,900	
		3,476,522
Domestic unmailable letters:		
Held-for-postage letters forwarded to address unopened on receipt of postage	76,230	
Held-for-postage letters opened	102,795	
Held-for-postage letters left on hand to await return of notices	2,559	
Letters containing unmailable articles opened	1,345	
Misdirected letters forwarded unopened after correction of address	81,834	
Misdirected letters opened	198,303	
Letters without address opened	11,979	
		475,045
Domestic third and fourth class matter:		
Parcels opened and returned	32,320	
Parcels opened and left on hand	2,926	
		35,246
Foreign matter:		
Letters delivered	401,159	
Letters still on hand	4,189	
Parcels of printed matter, samples, &c., returned unopened	19,960	
		425,308

MATTER OPENED IN DEAD-LETTER OFFICE.

The following was the disposition of mail matter opened in the dead-letter office:

Delivered:		
Letters containing money	11,965	
Letters containing drafts, checks, and other evidences of monetary value	17,737	
Letters containing receipts, paid notes, &c	35,805	
Letters containing postage-stamps	63,695	
Letters containing nothing of value	674,930	
Photographs	27,779	
Parcels of merchandise, books, &c	32,320	
		864,231
Returned and awaiting evidence of delivery:		
Letters containing money	787	
Letters containing drafts, checks, &c	665	
Parcels of merchandise, books, &c	8	
		1,460
Under treatment looking to delivery:		
Letters containing money	1,389	
Parcels of merchandise, books, &c	2,926	
		4,315
Filed upon failure to deliver:		
Letters containing money	3,919	
Letters containing drafts, checks, &c	662	
Letters containing receipts, paid notes, &c	4,410	
Letters containing postage-stamps	2,442	
Photographs	7,381	
Parcels of merchandise, books, &c	46,905	
		65,719
Destroyed:		
Letters containing nothing of value, including 70,100 letters forwarded to writers and returned upon failure to deliver		2,586,615
Parcels containing magazines, pamphlets, fruit, cakes, seeds, &c		14,649
		2,601,264

FOREIGN DEAD MAIL MATTER.

The following statement shows the disposition during the year of dead mail matter originating in foreign countries:

Returned to country of origin:		
Registered letters		10,803
Ordinary letters		380,275
Parcels of printed matter, &c		19,634
		410,712
Delivered to addressees upon their application:		
Registered letters	344	
Ordinary letters	242	
		586
Misdirected matter forwarded to corrected addresses:		
Ordinary letters	9,367	
Parcels of printed matter, &c	299	
Registered letters	155	
		9,821
On hand under treatment:		
Registered letters	344	
Ordinary letters	3,845	
		4,189
Grand total		425,308

MATTER RETURNED FROM FOREIGN COUNTRIES.

The following number of pieces of matter originating in the United States was returned to the dead-letter office from foreign countries during the year, as undeliverable:

Registered letters	1,143
Ordinary letters	148,850
Parcels of printed matter	26,354
Total	176,347

DEAD REGISTERED MATTER.

Of the 15,192 unclaimed registered letters and parcels received, there were—

Delivered to addressees or restored to senders	14,539
Returned to postmasters for delivery and awaiting receipts	9
Filed upon failure to discover ownership, subject to future reclamation	644
Total	15,192

REVENUE FROM DEAD MATTER.

The sum of $3,693.27 was received for postage on insufficiently prepaid letters forwarded to destination, and upon articles of third and fourth class matter returned to the senders; $7,782.16 was taken from dead letters which could not be restored to the owners; and the amount realized from the auction sale in December last, of articles of merchandise for which no owners could be found, was $4,497.67. Owing to the steady increase in the number of parcels received, and the lack of room for storing parcels which cannot be delivered, it will be necessary to make a sale of such matter annually hereafter. While there has been an increased number of parcels received, the records show a material reduction in the number of letters in which articles of value (except postage-stamps) were found. There has been an increase in the num-

ber of letters containing postage-stamps, which, since the retirement of fractional currency, have furnished the most convenient means of remitting sums of less than one dollar. The introduction of the postal notes will probably reduce the number of remittances by stamps hereafter.

Statistics more in detail concerning the operations of the dead-letter office will be found in tables numbered 9 to 16, hereto attached.

TREATMENT OF HELD-FOR-POSTAGE LETTERS.

The change in the method of treating insufficiently prepaid letters and parcels deposited for mailing at the more important post-offices has resulted, of course, in a material reduction of the number of pieces of such matter sent to the dead-letter office, 181,584 being the number of letters received, while in the previous year they amounted to 275,240. The new plan having met with such decided manifestations of approval by the public, it was deemed advisable to put it into operation at other offices, and an order was issued accordingly (Postmaster-General's Order No. 514, May 19, 1883), to take effect on July 1, 1883. The reduction of letter-postage from 3 to 2 cents per half ounce will doubtless have the effect to materially decrease the number of held-for-postage letters in this country, for the reason that under the former rate many letters bearing 2-cent stamps were necessarily detained. This was notably the case at free-delivery offices, where, according to the statistics of the Department, fully 45 per cent. of the held-for-postage letters were actually prepaid at the local or drop rate. For a detailed account of the held-for-postage business transacted at the free-delivery offices during the year, see table No. 15.

MISDIRECTED AND MISSENT LETTERS.

The whole number of misdirected letters sent as such to the dead-letter office during the year was 324,429, an increase of 8,600, or 2.7 per cent., over the previous year. Of these, fully 29 per cent. were delivered unopened to the persons addressed, through the efforts of clerks in the dead-letter office, some of whom have acquired great expertness in reading "blind" writing, and familiarity with the local names of places where those of the town and post-office differ.

Notwithstanding the fact that the Department has declared that matter addressed to any other than the official name of the post-office is unmailable, and that hundreds of thousands of letters have been delayed or missent through the failure of the public to regard the warning, it seems to be still a popular custom to omit the name of the post-office from the heading of letters, business as well as social, and use only the name by which the neighborhood is commonly called, or some romantic name which the writer chooses to apply to his farm or residence, thus inviting replies to be misdirected.

DIVISION OF REGISTRATION.

The total number of letters and parcels registered during the fiscal year ended June 30, 1883, was 10,594,716, of which 7,849,837 were domestic letters, 948,075 were domestic parcels of third and fourth class matter, 444,789 were letters registered to foreign countries, 22,806 were parcels of third and fourth class matter registered to foreign countries,

and 1,329,919 were letters and parcels registered for the government and by law exempted from the payment of registry fees.

The amount of registry fees collected during the year was $926,549.70, an increase over the previous year of $85,057.80, or 10.10 per cent.

The increase in the number of letters and parcels forwarded was 966,794, or 10.4 per cent.

During the year 7,941 registered letters and parcels were reported to the chief inspector as having been lost or rifled. Of these, 4,871 were found to have been properly delivered or accounted for, and 2,652 are still under investigation, leaving the actually ascertained losses at 418 cases. Should the cases still under investigation result in the same proportion of loss as those that have been closed, the total losses for the year will number 627, or, say, one out of every 16,897 pieces of registered matter mailed. Such a small proportion of casualties is unprecedented in the history of the registry system. The causes contributing to the losses were fire, theft, burglary, and highway robbery.

Statistics more in detail of the registry business will be found in tables numbered 17 to 20, attached to this report.

DIVISION OF FILES, RECORDS, AND MAILS.

The number of letters and packages received, opened, and examined during the year was 1,175,480. Of these, 728 contained money, and 5,673 contained stamps, envelopes, and postal cards returned for redemption.

Of the letters received, 39,473 were briefed and recorded, and filed after final action had been taken on them. The number of letters written in the office, copied, enveloped, and mailed was 13,861.

PREPARATIONS FOR REDUCTION OF POSTAGE.

Soon after the passage of the act of March 3, 1883, reducing letter postage to two cents on and after October 1, preparations were begun to carry the new law into effect. The change left the 3-cent denomination of postage-stamps of little utility, it no longer representing the single rate of postage on any class of matter, and it was determined to discontinue its issue. As the public would undoubtedly have regarded with disfavor the dropping of Washington from portraits forming the distinguishing feature in the series of postage-stamps, it was decided to replace the old 2-cent stamp by a new one bearing the profile of the first President, thus restoring it to its old place on the stamp in most general use. It was also decided to issue a new stamp of the value of four cents, a denomination not previously in use, and designed to cover two rates of letter postage. The portrait of Jackson, formerly on the 2-cent stamp, was transferred to this new (4-cent) stamp.

The following is a brief description of the new stamps:

TWO-CENT STAMP.

An oblong shield slightly shouldered on the upper square, the lower lines terminating in a point. Within this shield is an oval containing a profile bust of George Washington engraved in line, surmounted by a ribbon ending with small scrolls bearing the legend "United States Postage," in white letters. From each end of the scrolls a chain of pearls completes the outline of the oval.

A prominent white-faced figure "2" laps over the lower center point of the oval and shield, dividing the words "Two Cents."

The whole is inclosed in a dark upright square to give relief to the device. The stamp is printed in dark red.

FOUR-CENT STAMP.

Over an oval containing a bust of Andrew Jackson in profile is a ribbon with the legend "United States Postage," in white letters. A string of pearls forms round the lower half of the oval and unites the two ends of the ribbon. At the lower part of the oval, on either side, appears the figure "4," and under that the words "Four Cents," with a star on each side, all engraved in white-faced letters.

The whole device is inclosed in an upright oblong tablet. The stamp is printed in green.

It is worthy of notice that these are the first postage-stamps ever bearing the words "United States Postage" in full, the name of the country being abbreviated to "U. S." on all the other stamps. Changes were also made in the series of stamped envelopes, to embrace the head of Washington on the 2-cent envelope, and that of Jackson on the 4-cent envelope.

Postmasters were notified by circular of the coming change of postage, and instructed to make their requisitions for 3-cent stamps and envelopes sufficient only for carefully estimated needs to the 1st October. The requisitions were carefully scrutinized at the Department, and in many cases were either largely curtailed or wholly refused. The postmasters were instructed also to use all available means to call public attention to the change, so as to exhaust or reduce the supply of 3-cent stamps and envelopes in private hands.

The issue of the new 2-cent and 4-cent stamped envelopes was commenced on the 1st September, and of the 2 and 4 cent adhesive stamps on the 15th September; and they were so generally distributed by the 1st October that the change of postage was attended with but little inconvenience for want of the necessary stamps.

In this connection it is only just that I should express my appreciation of the zeal, energy, and fidelity with which the clerks engaged in the work met the extraordinary demand for stamps. The emergency forced them for weeks to prolong their labors far beyond the usual office hours, and they responded with the most cheerful alacrity.

EXCHANGE OF OUTSTANDING STAMPS AND ENVELOPES.

Despite the precautions taken, as already explained, to reduce the outstanding supply of 3-cent stamps and stamped envelopes, there is without doubt a large quantity of these stamps and envelopes remaining unused in the hands of the public. The holders of small lots are legion, and in many cases they are held in considerable amounts. Since the discontinuance of fractional currency stamps have frequently been used instead of silver in making small remittances, notably so in the case of newspaper subscriptions, with the result of forming no small accumulations. This has been evidenced by the frequent applications that have been made for the redemption of stamps.

Special-request envelopes are furnished only in quantities, and frequently the minimum number furnished will last the consumer for a long period; usually the requisitions are designed to last several months.

In the nature of the case there must be no inconsiderable quantity of this class of envelopes remaining unused. Unless they should be exchanged, the owners will have the option of sacrificing a third of their value by continuing to pay postage at the old rate, or of getting rid of them by the slow process of using them with the addition of adhesive stamps when making inclosures calling for more than one rate of postage.

Under the change of postage the 3 cent and 6 cent stamps and envelopes are not adapted to the purpose for which they were purchased, and in good faith they should be exchanged for other denominations suited to the present requirements. The change of postage also left a considerable quantity in the aggregate of 3 and 6 cent stamps and stamped envelopes in post-offices. For these there will be no further demand, and to relieve postmasters of the care and responsibility of holding them, they should be called in and redeemed.

The exchange and redemption suggested, if determined upon, will, of course, impose no small clerical labor upon the Department. The stamps to come from the public (through postmasters) will mostly be in small lots, in fragments of a sheet from a single stamp upwards, and the envelopes will usually be in broken parcels also. They will have to be examined, counted, and destroyed, and the proper credits must be allowed, entered, and reported. The present clerical force of the office is inadequate to the work, being fully occupied with the regular current business.

I have accordingly submitted in my estimates for the legislative, executive, and judicial appropriation bill an item for a special temporary force sufficient to effect the purpose, and, in view of the importance of making the exchanges, I hope this estimate will meet with approval.

INCREASE OF WORK.

The most casual examination of this report cannot fail to disclose a large increase in the clerical work of the office, resulting from the general growth of the postal service. In the stamp division there was an increase of 5,747 in the number of requisitions filled, and the registry service shows an increase of over 10 per cent. in its receipts. The dead-letter division exhibits an increase of over 4 per cent. in the number of pieces handled during the year.

In the finance division there was an increase of 8,765 in the number of certificates of deposit examined and recorded, and an increase of 9,982, or 22.8 per cent., in the number of drafts and warrants issued for the payment of creditors and the transfer of funds. Aside from the regular increase, a large addition to the number of warrants, estimated at 32,000, or nearly 60 per cent. for the next year, has recently been occasioned by the change on the 1st of October in the mode of compensating mail messengers. Previous to that date they were paid by postmasters, who were credited with the amounts in their accounts with the Auditor. The enlarged commissions allowed the smaller offices by the new salary law in most cases left insufficient funds in the hands of postmasters to pay the mail messengers, who are accordingly now paid by warrant out of the general postal fund.

I have the honor to be, very respectfully, your obedient servant,

A. D. HAZEN,
Third Assistant Postmaster-General.

Hon. WALTER Q. GRESHAM,
Postmaster-General.

REPORT OF THE SUPERINTENDENT OF THE POSTAL MONEY-ORDER SYSTEM.

POST-OFFICE DEPARTMENT,
OFFICE OF SUPERINTENDENT OF MONEY-ORDER SYSTEM,
Washington, D. C., October 24, 1883.

SIR: I have the honor to submit herewith a report of the operations of the postal money-order system of the United States for the fiscal year ended June 30, 1883, which exhibits a gratifying increase in both the domestic and international branches of that service.

NUMBER OF DOMESTIC MONEY-ORDER OFFICES.

At the close of the fiscal year ended June 30, 1882, there were in operation 5,491 domestic money-order offices. During the year ended June 30, 1883, 449 additional post-offices were established as money-order offices, and 13 offices were discontinued, so that, on June 30, 1883, there were in operation 5,927 money-order offices. Since that time the system has been extended to 391 post-offices and has been discontinued at 2, leaving at date of this report 6,316 offices which furnish money-order facilities.

ISSUES AND PAYMENTS OF DOMESTIC MONEY-ORDERS.

The number of domestic money-orders issued during the year was 8,907,556, amounting to		$117,329,496 31
And the number of such orders paid during the same period, was 8,602,625, of the aggregate value of	$116,498,702 04	
In addition to which 63,269 money-orders of the value of	845,579 74	
were repaid to the remitters,		
Making the total amount of payments and repayments		117,344,281 78
And the excess of payments over issues		14,875 47
The gross amount of the fees received by postmasters from the public for the issue of domestic money-orders, was		$1,101,891 80

These figures, compared with those of the preceding year, show an increase of $3,929,288.10, or 3.46 per cent. in the amount of orders issued, an increase of $3,955,979.88, or 3.49 per cent. in the amount of orders paid, and a gain of $48,111.25, or 4.57 per cent. in the amount of fees received.

The average amount of the orders issued was $13.32, being 15 cents less than during the fiscal year ended June 30, 1882, and the average fee was $12\frac{5}{100}$ cents, or exactly the same as the average fee of the previous fiscal year.

The office of the Paymaster-General of the Army purchased during the year for the payment of claims against the United States for the services of colored soldiers of the late war money-orders amounting to $18,477.90, which were not mailed directly from the War Department, but were sent through the office of the Superintendent of the Money-Order System in order to secure correct payment. The amount of such orders so transmitted during 1881–'82 was $46,490.72.

DUPLICATE MONEY-ORDERS.

Table B, hereto annexed, is a detailed statement of the duplicate money-orders issued by this office during the last fiscal year. They numbered 24,208, or 2,274 more than during the previous year. Duplicate orders are issued without additional charge whenever the original

order has been lost before payment or in transmission or has been destroyed. Existing law also contains provision for the issue of duplicates when the originals are not presented for payment within a year from date of issue or when the originals bear more than one indorsement, the originals in either case being declared invalid. Likewise when payment of original orders, drawn in favor of fraudulent lotteries or of persons engaged in conducting schemes or devices for obtaining money through the mails by means of false or fraudulent pretenses, representations, or promises, has been prohibited by the Postmaster-General, the money is returned to the remitters by means of duplicate orders.

DRAFTS AND TRANSFERS.

The total amount of transfers made by postmasters during the year from the postage fund to the money-order fund was $934,516.74, of which sum $124,002.46 were retransferred to the postage account, leaving a balance of $810,514.28 in favor of the postage account, which has been repaid by a deposit in the Treasury for the service of the Post-Office Department made October 2, 1883. The above transfers from the postage to the money-order account were made to provide for the prompt payment of money-orders at offices where at times the funds received from the issue of money-orders are not sufficient to meet all demands.

When the payments of money-orders are continuously greater than the issues at any Eastern post-office, the postmaster is furnished with a letter of credit upon the postmaster at New York, and with blank drafts to use in drawing against the same. To offices on the Pacific Slope, funds are supplied by the postmaster at San Francisco or the postmaster at Portland, Oregon. During the last fiscal year the total amount of drafts drawn against letters of credit on New York was $10,945,687.52, and the San Francisco post-office furnished the sum of $168,245.00, and the Portland post-office the sum of $30,288.00 to Western offices during the same period.

REMITTANCES OF SURPLUS MONEY-ORDER FUNDS.

The sum of $97,452,057.83, being surplus funds not immediately needed at the remitting offices for the payment of money orders, was forwarded during the year to certain post-offices designated as depositories.

LOST REMITTANCES.

During the last fiscal year there were 166 cased of alleged lost remittances of surplus money-order funds under investigation, of which number 87 cases, amounting to $9,953.45, occurred during the year 1881–'82, and, of these, 80 cases, aggregating $9,646.45, were unsettled at the close of that year, and the remaining 7 cases, involving $307, were not reported to this office until after that time.

Post-office inspectors recovered the sum of $3,416.81, representing 45 remittances; the remitting postmasters were charged with the loss of $24, in two cases, in one of which no claim was made by the postmaster, while in the other the inspector in charge of the investigation decided that the money had never left the post-office; it was afterward ascertained that 8 of the alleged lost remittances, containing $1,765, had been duly received; and 6 cases, aggregating $676, were incomplete and had not yet been referred to the Assistant Attorney-General for this Department on June 30, 1883.

One hundred and five cases, involving claims to the amount of $10,690.45, were referred to the Assistant Attorney-General for the Post-Office Department for his consideration under the act of March 3,

1882, entitled, "An act authorizing the Postmaster-General to adjust certain claims of postmasters for loss by burglary, fire, or other unavoidable casualty," which empowers the Postmaster-General, with certain restrictions—

To credit postmasters with the amount of any remittance of money-order funds made by them in compliance with the instructions of the Postmaster-General, which shall have been lost or stolen while in transit by mail from the office of the remitting postmaster to the office designated as his depository.

A tabulated statement of all these cases is appended hereto. (Table C.)

ERRONEOUS PAYMENTS OF MONEY-ORDERS.

Part of the work of this office for the last fiscal year was the investigation and consideration of 100 cases of alleged improper payment of money-orders, aggregating $2,573.17. Thirty-two claims of this character were on account of orders issued during the year, and the ratio of the latter number to the total number of orders paid is as 1 to 273,471. Forty-four cases, amounting to $1,315.48, remained unsettled at the close of the previous fiscal year, and 24 of the orders, of the value of $702.64, were issued during that year but were not brought to the notice of the Department until after June 30, 1882.

The amount represented by 29 orders, $930.08, was secured by Post-Office inspectors and paid to the rightful owners; the payees were adjudged at fault in 3 cases, amounting to $51, and the remitters in 10 instances, where the orders aggregated $348.65. Investigation established the fact that 9 of the orders, of the value of $151.85, had been properly paid. In 22 cases, involving $452.86, it was found that the postmasters who erroneously effected payment neglected to take proper precaution, and they were held responsible for the money; while in 4 cases the loss, amounting to $156.09, was made good by the Department. At the close of the year there remained 23 unsettled claims, amounting to $482.64. (See Table D.)

REVENUES AND EXPENSES.

The Auditor of the Treasury for the Post-Office Department reports that the receipts and expenses of the domestic money-order system for the fiscal year ended June 30, 1883, were as follows:

Receipts:		
Amount received for fees on issued orders		$1,101,821 80
Amount received for premiums, &c	$437 93	
Profit	578 69	
		1,016 62
		1,102,838 42
Expenditures:		
Amount allowed postmasters for commissions and clerk-hire:		
Commissions	$492,929 88	
Clerk-hire	185,595 63	
Loss	13,378 88	
Incidental expenses	99,229 36	
		$791,133 75
Excess of receipts over expenditures, being gross revenue		$311,704 67

Under the law in force prior to July 1, 1883, a postmaster was debarred from receiving money-order commissions in excess of such a sum as, when added to his annual salary, would make a total of $4,000. The above item of "commissions and clerk-hire" embraces the sum of $185,595.63, allowed to the larger post-offices in the form of clerk-hire for money-order business, out of the commissions which accrued on that

business and which the postmasters could not themselves receive for the transaction thereof as did the postmasters at smaller offices.

The item of "incidental expenses" includes the sum of $59,647.53, which was paid to the Public Printer for books, blanks, printing, and stationery required by postmasters and the Department in the transaction of domestic money-order business. A portion of this amount, to wit, $19,674.14, was paid for work and material ordered during the fiscal year ended June 30, 1882. The total amount paid the Public Printer on both domestic and international account was $65,469.42, $20,449.16 of this sum being for work and material ordered during the previous fiscal year.

With this report is submitted a tabular statement, A, showing the operations of the domestic money-order system for each year from the date of its establishment, November 1, 1864, until June 30, 1883.

EXTENSION OF THE INTERNATIONAL MONEY-ORDER BUSINESS.

International money-order exchanges are now carried on with the undermentioned countries, to wit: Canada, Great Britain and Ireland, Germany, Switzerland, Italy, France, Jamaica, New Zealand, New South Wales, Victoria, Belgium, Portugal, Tasmania, and British India, the business with the latter country being transacted through the intermediate agency of the British Post-Office Department. The business with India was begun on July 1, 1882; with Belgium and Tasmania on January 1, 1883, and with Portugal on July 1, 1883.

A convention for a like purpose has been concluded between the Hawaiian Kingdom and the United States, to take effect January 1, 1884, and this Department is now in correspondence with the postal administrations of Sweden, Norway, Japan, Barbadoes, the Cape Colony, and Queensland, looking to the establishment of money-order facilities between the United States and each of those countries.

Annexed hereto are copies of the money-order conventions with Belgium and Tasmania, respectively.

On June 30, 1883, there were 1,495 post-offices empowered to issue and to pay international money-orders, and these employ a uniform blank for international orders of all the above mentioned varieties.

STATISTICS OF THE INTERNATIONAL MONEY-ORDER BUSINESS.

The number and amount of orders of each of the international classes, issued and paid, the amount of orders repaid, the amount of fees received during the year, and the percentage of gain in issues, payments, and fees, over the business of the previous fiscal year, are shown in the following tabular statement:

	Number of orders issued.	Amount of orders issued.	Amount of orders repaid.	Number of orders paid.	Amount of orders paid.
Canadian	48,094	$1,016,598 62	$5,007 08	65,809	$1,014,887 79
British	220,624	3,194,126 64	8,681 02	29,546	483,142 94
German	151,962	2,450,969 43	15,098 09	41,187	1,242,478 84
Swiss	13,541	272,512 83	918 62	4,271	124,380 07
Italian	23,418	640,035 35	1,403 36	724	19,979 89
French	7,672	121,805 30	1,395 12	3,128	71,296 09
Jamaica	136	2,628 62	73 05	775	18,204 97
New Zealand	169	4,837 41	.....	1,275	19,685 22
New South Wales	115	2,804 47	200 00	532	11,685 44
Victoria	124	2,675 35	.....	465	10,584 13
Belgian	413	7,863 74	.....	371	9,390 10
Tasmania	5	91 52	.....	26	471 36
India	53	882 83	10 00	343	4,213 87
Totals	466,326	7,717,832 11	32,786 34	148,452	3,030,400 71

	Amount of fees received.	Amount of gain in orders issued over 1881–'82.	Percentage of gain in issues over 1881–'82.	Amount of gain in orders paid over 1881–'82.	Percentage of gain in payments over 1881–'82.	Amount of gain in fees received over 1881–'82.	Percentage of gain in fees over 1881–'82.
Canadian	$17,341 70	*$2,043 00	*00.20	$229,561 78	29.23	$97 15	.56
British	91,205 50	453,764 55	16.56	75,376 01	18.48	12,679 20	16.14
German	44,249 10	393,264 01	19.11	194,538 07	18.56	7,463 40	20.19
Swiss	4,631 20	66,692 77	32.40	11,088 02	9.79	39 70	.86
Italian	10,190 25	231,813 75	56.78	363 03	1.85	3,610 65	54.88
French	2,221 40	22,007 20	22.12	13,943 30	24.31	405 95	22.36
Jamaica	46 50	Exchange did not go into operation until January 1, 1882.					
New Zealand	82 20						
New South Wales	50 80						
Victoria	47 10						
Belgian	136 30	Exchange did not go into operation until January 1, 1883.					
Tasmania	1 70						
India	35 55	Exchange did not go into operation until July 1, 1882.					
Totals	170,238 80						

* Decrease.

REVENUE FROM INTERNATIONAL MONEY-ORDER BUSINESS.

In the report of the Auditor for this Department are detailed statements of the revenues from the various international exchanges during the fiscal year ended June 30, 1882, the amounts thereof being as follows:

From the Canadian business		$9,841 56
From the British business		44,090 14
From the German business		29,593 41
From the Swiss business		3,784 30
From the Italian business		10,994 75
From the French business		1,559 29
From the New Zealand business		50 84
		99,923 29
Loss on the Jamaica business	$0 13	
Loss on the New South Wales business	6 78	
Loss on the Victoria business	1 68	
		8 59
A total revenue of		99,914 70

A report of the revenues from international money-order business for the last fiscal year cannot be furnished by the Auditor's office at this time, because the adjustment of the accounts for the last quarter of that year is at present incomplete.

GENERAL FINANCIAL RESULTS.

To summarize, the number of money-orders of all kinds, domestic and international, issued during the last fiscal year was 9,273,882, amounting to $125,047,238.42, and the number of money-orders of all kinds paid was 8,751,077, aggregating, with the repayments, $120,407,468.83. The gross amount of fees received was $1,272,060.60.

The amount of the gross revenue from the domestic and international money-order business as reported by the auditor, $411,619.37, was deposited in the Treasury of the United States for the service of the Post-Office Department, on October 24, 1883, in accordance with the requirements of section 4050 of the Revised Statutes.

The net profit of the money-order business can only be fairly shown by subtracting from the above amount all such items of expense as were defrayed from appropriations, namely:

Salaries to 42 employés in the superintendent's office	$56,800 00
Salaries to 139 employés in the money-order division of the Auditor's office	151,560 00
Stationery furnished for use in the superintendent's office	543 10
Books, blanks, printing, and stationery furnished for use in the money-order division of the Auditor's office	6,729 09
Salaries of employés in the money-order building under the supervision of the custodian	7,652 91
Rent of the money-order building	7,999 98
Furniture for the same	12,089 78
Miscellaneous expenses of same	8,142 88
Transfer of money-order office to new building	997 29
Total	252,515 03

There remains the sum of $159,104.34, over and above all determinable disbursements for the money-order service, representing the net revenue.

THE POSTAL NOTE AND RECENT MODIFICATIONS OF THE MONEY-ORDER SYSTEM.

An act entitled "An act to modify the postal money-order system and for other purposes" passed both houses of the last Congress, and was approved by the President on March 3, 1883.

It authorized the issue of the postal note for sums less than $5, payable to bearer, provided for the purchase of all printed and engraved matter for the money-order system from the lowest responsible bidder under contract for a term of four years, reduced the fee for money-orders not exceeding $10 to 8 cents, increased the maximum amount of a money-order to $100, and established a uniform rate of compensation for the transaction of the money-order business in post-offices. The new schedule of fees and the change in the amount of money-orders were put into operation on July 2, 1883.

Contracts have been duly executed with the Homer Lee Bank-Note Company of New York for furnishing postal notes and money-order drafts; with Messrs. Wynkoop & Hallenbeck, of New York, for furnishing bound blanks and blank books for the money-order business; and with Messrs. Matlack & Harvey, of Philadelphia, for furnishing unbound blanks for that business.

The postal-note business was commenced simultaneously at all money-order offices on September 3, 1883. Some difficulty was encountered at the outset by reason of the lack of familiarity of postmasters with the new forms and with the system of punching adopted for designating the amount, but complaints on that score have very sensibly diminished. This means of making small remittances by mail has been quite extensively employed by the public from the inception of the system.

Below is a comparative statement of the number and amount of postal notes and money-orders paid at the New York post-office from September 3 to October 20, 1883, which is of interest in this connection.

The postal note is somewhat of an experiment, and experience alone can demonstrate what modifications, if any, it would be wise to make therein.

Comparative statement of the postal notes and money-orders paid at the New York post-office from September 3 to October 20, 1883, both days inclusive.

Number of postal notes paid		57,374
Number of money-orders paid		89,126
Of the total number of payments the postal notes comprised about, per cent		39
And the money-orders about, per cent		61
Amount of postal notes paid		$106,854 31
Amount of money-orders paid		$1,136,498 81
The average amount of the postal notes paid was		$1 86

RECOMMENDATION FOR A CHANGE IN THE MANNER OF DEFRAYING THE EXPENSES OF THE MONEY-ORDER SYSTEM.

Under existing law some of the expenses of the money-order system are paid directly out of the proceeds of the business, and others out of appropriations made by Congress.

The proceeds of the money-order business comprise the fees received from the public on orders issued, and the premium, if any be obtained, on drafts drawn on money-order account, which, being an excellent medium of exchange on New York, sometimes command a premium.

The expenses now paid out of appropriations are the following:

Salaries of employés in the office of the Superintendent of the Money-Order System.

Salaries of employés in the money-order division of the office of the Auditor of the Treasury for the Post-Office Department.

Stationery for use in the Superintendent's Office.

Books, blanks, printing, and stationery for use in the money-order division of the Auditor's Office.

Rent of the money-order building in Washington, furniture for the same, and incidental expenses connected therewith.

The expenses directly paid from the proceeds of the business are as follows:

Commissions to postmasters at offices below the first class, which commissions, under the act of March 3, 1883, are allowed at the rate of three and one-half cents for each domestic or international money-order issued, paid or repaid, and for each certificate of deposit issued, and one cent for each postal note issued, and three-quarters of one cent for each postal note paid.

Clerk-hire at offices of the first class allowed by the Postmaster-General at the same rates as those prescribed for commissions at smaller offices, in accordance with the act above mentioned.

Reimbursement for lost remittances of surplus money-order funds.

Bad debts of the system.

Incidental expenses, including the cost of stationery used for the transaction of the money-order business in post-offices, and the cost of books, blanks, and printing for the transaction of that business in post-offices and in the Superintendent's Office.

After these latter expenses, paid from proceeds, have been defrayed, the remainder of the proceeds is annually reported by the Auditor as "revenue from the money-order business," and is deposited in the Treasury for the service of the General Post-Office Department, in accordance with the terms of section 4050 of the Revised Statutes of the United States.

By this mode of procedure the cost of the money-order service may be readily ascertained, with the exception of certain items which must necessarily be the subject of conjecture or estimate, as, for example,

the proportion of the expense for fuel, lights, rent, &c., in large offices, which should properly be chargeable to that branch of the postal establishment. The expense of this service being in great measure a matter of accurate record, it is easy to regulate the fees or charges to the public for money-orders, so as to make the system self-sustaining without causing it to yield any considerable revenue.

This method of conducting the money-order business is, however, attended with some serious difficulties. The commissions and allowances to postmasters for clerk-hire in the money-order business are given at a fixed rate for the performance of a definite service, and it would therefore be manifestly improper to permit any portion of such commissions or clerk-hire allowances to be misused or diverted from their proper channel, or to allow any portion of the sums appropriated by Congress and apportioned by the Department for other specific services in post-offices to be spent for the benefit of the money-order business, the separate rate of compensation for which is absolutely fixed by law. In order to prevent abuses, therefore, the law and the orders of this Department founded thereon strictly prohibit any clerk in a post-office, who is paid in whole or in part out of the appropriation made by Congress for clerks in post-offices, from being employed in the money-order business, and, on the other hand, they prohibit the employment in other branches of the office of clerks paid from the money-order funds. But in many of the smaller post-offices the amount of work of all kinds to be performed (postal and money-order) may readily be done by one clerk. The inevitable result, therefore, is that at such small offices, where the money-order work is not sufficient to engage the whole time of a single clerk and the money-order commissions not adequate to pay for such time, the postmaster is compelled to attend to the money-order business himself, or pay therefor from his private funds, while at the same time he may have in the post-office a clerk paid from postal funds whose time is not fully occupied. Experience has shown that any deviation from this rule or license in regard to the employment of clerks in different branches of the post-office, when these clerks are paid from separate funds for well-defined and different kinds of labor, opens the door to very general and grievous abuses. For example, the money-order commissions at a second-class post-office accrue to the postmaster; if a postmaster of this class be permitted to employ in the money-order business his clerks paid from postal funds, the temptation is placed before him to appropriate the money-order commissions to his personal use, and to impose a great part or all of the money-order work on such clerks, thus making the money-order service an indirect charge on the postal funds.

I am of the opinion that this difficulty may be remedied by turning all the proceeds of the money-order business each year—or each quarter, if thought advisable—into the Treasury for the service of the Post-Office Department, and by providing for all the expenses of the money-order system by appropriations, such appropriations not to be made for that service specifically, but to be combined with the appropriations for the General Post-Office Department. Thus, no distinction would be made between the expenses for clerical labor in postal business and those for clerical labor in money-order business, a distinction which it is both unnecessary and troublesome to maintain, while, when occasion required, the special cost of clerical labor in the money-order business could be quite accurately estimated from data compiled at a selected number of money-order offices.

It would then only remain to provide compensation for the transac-

tion of the money-order business at post-offices where no clerk-hire is allowed out of the postal funds, to wit, at all offices of the third and fourth classes which are not charged with the duty of separating mails. At present such compensation accrues to the postmaster, but is paid, as above stated, directly from the money-order proceeds. I beg to suggest that pay for this service be given in the form of an addition to the postmaster's salary, to be based upon the number of money-order transactions, and to be provided for in the appropriation for the salaries of postmasters.

No difficulty is now encountered in defraying from the proceeds of the money-order system the other expenses now paid from such proceeds, to wit, the amount of lost remittances of surplus money-order funds, the cost of stationery in post-offices, and of books, blanks, and printing for the conduct of the business; but it would be well for the sake of uniformity, and because it would be more in consonance with the practice of all the executive Departments, to have these expenses likewise provided for by additions to the regular appropriations for the Post-Office Department.

I am, sir, very respectfully, your obedient servant,

C. F. MACDONALD,
Superintendent of Money-Order System.

Hon. W. Q. GRESHAM,
Postmaster-General.

REPORT OF THE SUPERINTENDENT OF FOREIGN MAILS

POST-OFFICE DEPARTMENT,
OFFICE OF FOREIGN MAILS,
Washington, D. C., October 27, 1883.

SIR: I have the honor to make the following report of the principal operations of the foreign mail service for the fiscal year ended June 30, 1883:

WEIGHT OF MAILS.

The total weight of the mails dispatched during the year to countries and colonies of the Universal Postal Union (the Dominion of Canada excepted) was 1,148,822,730 grams, or 2,532,990 pounds, an increased weight over the preceding year of 329,114 pounds. The weight of the letter mails was 218,371,149 grams, or 481,477 pounds, and of printed matter and samples of merchandise 930,451,581 grams, or 2,051,513 pounds, an increased weight, as compared with the preceding fiscal year, of 67,122 pounds of letters, and 261,992 pounds of printed matter and samples.

Of the letter mails dispatched, 198,954 pounds (41.32 per cent.) were sent to Great Britain and Ireland, 110,804 pounds (23.01 per cent.) to Germany, 129,534 pounds (26.91 per cent.) to other countries of Europe, and 42,185 pounds (8.76 per cent.) to Postal Union countries and colonies other than European.

Of the printed matter and samples dispatched, 848,326 pounds (41.35 per cent.) were sent to Great Britain and Ireland, 354,799 pounds (17.30 per cent.) to Germany, 424,475 pounds (20.69 per cent.) to other countries of Europe, and 423,913 pounds (20.66 per cent.) to other Postal Union countries and colonies.

Compared with the weights of mails dispatched during the preceding year, the increase of letter mails was 16.20 per cent., and of printed matter and sample mails 14.64 per cent.

A comparison of the weights of the mails dispatched to foreign countries during the fiscal year 1883 with those of the fiscal year 1880 shows the increase of correspondence to have been as follows:

Weight of letter mails:	Pounds.
In 1883	481,477
In 1880	272,181
An increase in three years of	209,276
Or 76.90 per cent.	

Weight of printed matter and sample mails:	Pounds.
In 1883	2,051,513
In 1880	1,181,420
An increase in three years of	870,093
Or 73.65 per cent.	

Reference is made to the tables accompanying the Report of the Auditor of the Treasury for the Post-Office Department for the separate weights of the mails dispatched to each country of the Universal Postal Union.

The number of letters exchanged with countries and colonies not embraced in the Universal Postal Union, exclusive of Canada, was 410,600, of which number 368,030 were sent to, and 42,570 received from such countries, an increase compared with the previous fiscal year of 272,861 letters sent to, and a decrease of 31,093 letters received from non-Union countries.

COST OF THE FOREIGN MAIL SERVICE.

The sums reported for payment on account of sea transportation of the mails dispatched to and received from foreign countries during the fiscal year 1883, including 15,423 francs and 50 centimes ($2,976.68) credited to France in the quarterly accounts with the French postal administration for the conveyance of United States mails by French contract packets from New York to Havre, amounted to $316,522.13, an increase over the cost of the same service in 1882 of $36,358.15. Of this amount $263,621.52 was reported for the transatlantic service; $19,251.14 for the transpacific service, and $33,649.47 for services to and from the Isthmus of Panama, Central America, and the South Pacific; to Mexico, Cuba, Porto Rico, and other West India Islands; to Brazil, the Argentine Republic, Paraguay, and Uruguay; to Venezuela, and to Canada and Newfoundland. Particulars of these services are appended in statement marked A.

The average amounts of postage earned each trip on the principal ocean steamship lines were as follows:

TRANSATLANTIC LINES.

	Per trip.
Cunard line from New York	$775 00
Cunard line from Boston	16 96
Hamburg-American line from New York	514 83
Guion line from New York	1,142 12
North German Lloyd from New York	639 10
White Star line from New York	780 27
Inman line from New York	559 99
Anchor line from New York	100 11
American line from Philadelphia	83 51

TRANSPACIFIC LINES.

Pacific Mail line to Japan, China, &c	$129 23
Pacific Mail line to New Zealand, Australia, &c	895 27
Occidental and Oriental line to Japan, China, &c	119 24

MISCELLANEOUS LINES.

Pacific Mail line from New York to Aspinwall and Panama	$131 21
Pacific Mail line from San Francisco to Mexico and Central America	63 74
Atlas line, New York to Porto Rico and other West India Islands	30 81
New York, Havana and Mexican Mail line, New York to Mexico	97 49
New York, Havana and Mexican Mail line, New Orleans to Mexico	58 23
Morgan line, New York and Galveston to Mexico	35 74
United States and Brazil line	157 46
Merchants' line, United States to Brazil	95 10
Booth Steamship Company, United States to Brazil	63 21
New York, Havana and Mexican mail, New York to Cuba	86 81
New York and Cuba Mail Steamship Company, New York to Cuba	38 09
Morgan line, New Orleans and Key West to Cuba	7 15

A comparison of the cost of foreign mail transportation for the fiscal year 1883, with the cost of the same service in 1880, shows the increase to have been as follows:

Cost of the service in 1883	$316,358 15
Cost of the service in 1880	198,667 46
Difference	117,690 69

An increase in three years of over 59 per cent.

The expenses (chargeable to the foreign mail service) of maintaining the United States postal agency at Panama (United States of Colombia) for office rent, clerk hire, porterage of mails, and other miscellaneous items, amounted to $240. No quarterly accounts were rendered during the year for similar expenditures of the postal agencies at Aspinwall, United States of Colombia, and Shanghai, China.

The cost of the sea conveyance of the British Australian closed mails from New York to ports of Great Britain and Ireland, paid by the British office for account of this department to the respective steamship companies performing the service, was 74,831 francs and 96 centimes ($14,442.57).

The aggregate amount of the balances paid to this department on settlement of transit and postage accounts with other Postal Union administrations for the calendar year 1882 was $104,201.20, and the aggregate amount of the quarterly balances paid by this department to other Postal Union administrations for the same year was $42,685.41.

The sums credited to this department by Postal Union administrations on account of the United States territorial and sea transit of foreign mails amounted to 755,323 francs and 64 centimes ($145,777.46) of which sum $115,524.50 was for the territorial transit of the British and Australian closed mails, and the sums credited by this department to Union administrations on account of foreign territorial and sea transit of United States mails amounted to 449,460 francs and 68 centimes ($86,745.91).

The amounts estimated as necessary for appropriation for foreign mail service for the fiscal year 1884–'85, are as follows:

For ocean transportation of mails	$425,000 00
For balance due foreign countries, including the United States' portion of the expenses of the International Bureau of the Postal Union, and the subscription of the department for copies of the monthly journal of the Union, "l'Union Postale"	75,000 00
Total	500,000 00

In consequence of the constantly increasing weight of the mails dispatched to foreign countries the amount appropriated for their transportation during the fiscal year ended June 30, 1883, proved insufficient to meet the full cost thereof, the deficiency amounting to $13,564.82.

In estimating for the cost of the service during the fiscal year to end June 30, 1885, the usual percentage of increase has been taken as basis of calculation, and it is believed that the sum of $425,000 will be required to defray the cost of the service on the basis of an allowance of *the sea postages only* to all steamships or other vessels employed in transporting the mails. If, however, it is the will of Congress that the entire postages, sea and inland, upon the mails conveyed shall be allowed and paid for the mails transported during that year by United States steamships, this estimate must be increased in the sum of $200,000, making the total appropriation required for the ocean transportation of mails during said year $625,000.

THE UNIVERSAL POSTAL UNION.

Tamatave, in the island of Madagascar, has been included for postal purposes in the territory of Réunion, one of the French colonies embraced in the Universal Postal Union.

An application has been made by the British colony of the Cape of Good Hope for admission, upon certain conditions, to the Postal Union, which has been submitted by the International Bureau to the vote of the several governments of the countries composing the Union. These conditions are:

1. That the rates of payment for sea transit and the surtaxes fixed by the Convention of Paris shall not be reduced, at all events until after the next quinquennial congress to that of 1884; and,

2. That the colony shall have a separate voice in the affairs of the Postal Union.

The result of the vote on this application has not yet been announced by the International Bureau.

It is also announced by the British Post-Office that five out of the seven Australasian colonies, viz, Victoria, South Australia, New South Wales, Western Australia, and Tasmania, have agreed to apply for admission to the Union upon like conditions to those proposed by the colony of the Cape of Good Hope. Should these important groups of British colonies in South Africa and Australasia be admitted to the Union on the conditions proposed, all countries and colonies of the world of any considerable importance having postal services, Bolivia alone excepted, will be embraced in the Universal Postal Union.

MODIFICATIONS OF POSTAL ARRANGEMENTS.

On the 1st of October, 1883, the prepaid postage charge on ordinary letters mailed in the United States and addressed to the Dominion of Canada was reduced to 2 cents per single rate of half ounce or under. This resulted from the reduction in the rate of United States domestic postage upon first-class matter to take effect on that date, as our special postal arrangement with Canada adopts the domestic postage rates of each country as the rates to be prepaid upon international mail matter forwarded from either country to the other.

Formal articles of a special agreement have been transmitted to the postal administration of the Argentine Republic, for execution by that administration, increasing the limits of weight and dimensions of pack-

ets of samples of merchandise exchanged with that country to a weight of 350 grams, and the dimensions to 30 centimeters in length, 20 centimeters in breadth, and 10 centimeters in depth.

Negotiations are pending with the government of Japan for the execution of a special postal agreement according to the official correspondence between each government and its legation and consulates near the other, exemption from postage charges.

Arrangements have been made with the colonies of New South Wales and Queensland for using the *open mail* intermediary of the United States for the correspondence forwarded by said colonies for Mexico, the West India Islands, and countries of Central and South America.

In the month of December, last, a proposal was submitted by this department to the post-department of the colony of New South Wales for a modified postal arrangement adopting the leading features of the Convention of Paris, which was declined on account of the fiscal objections involved in adopting the reduced postal rates of the Postal Union. But it is gratifying to learn that steps are now being taken by all of the Australian colonies for their entrance into the Union.

Notice has been given by the International Bureau that by an imperial Russian decree of June 1, 1882, books in the Russian language, published in countries other than Russia, are subject to customs duty on entering Russia, and consequently are excluded from the mails.

It appearing that the postal business of the postal agency at Shanghai, China, required for its proper management an additional allowance for clerk hire, an order was made on the 1st of February, last, allowing compensation for clerk hire at the rate of $1,200 per annum from April 1, 1883; and for a similar reason, the United States consul at Panama, United States of Colombia, has been allowed the sum of $600 per annum for clerical labor at his agency, commencing on July 1, 1883.

Sundry propositions to amend the Convention of Paris, and the detailed regulations thereunder, which have been submitted to a vote of the Postal Union administrations, have failed of adoption; and others, which would have been submitted to a vote, have been withheld for consideration at the next Postal Congress, which will convene at Lisbon on the 1st of October next.

* * * * * * *

SUBJECTS FOR LEGISLATION.

As has been fully explained in previous reports, this department is unable, without legislation, to carry out the provisions of Articles 6 of the Postal Union Convention concluded at Paris on June 1, 1878, respecting the payment of a limited indemnity for lost registered articles by the administration upon whose territory, or in whose maritime service, the loss has occurred. This legislation has been recommended to Congress by several of your predecessors, and should be enacted to carry out in good faith the stipulations of that Convention.

In my last report I named forty-two countries and colonies of the Universal Postal Union, outside of Europe, which had, since the conclusion of the Paris Convention, agreed to the principle of responsibility for losses of registered articles on their territory, or in their maritime service. Since that time five additional members of the Postal Union, viz, Japan, Venezuela, the Falkland Islands, Nicaragua, and Liberia, have agreed to pay indemnities for such losses. This department, as also the postal administrations of Ecuador and Salvador, have advised the International Bureau that they have submitted to their national

legislatures projects of laws authorizing them to subscribe to this provision of Article 6 of the Convention of Paris.

I also renew the recommendation, made in the report of last year, for such a modification of section 17 of the act of March 3, 1879, as will enable the Secretary of the Treasury and the Postmaster-General to adopt regulations for the transmission to addressees, through the mails, of such dutiable articles of mail matter as may reach this country in the mails from other countries.

I also recommend that the present law fixing rates of postage upon letters brought into the United States from foreign ports by vessels not regularly employed in carrying the mails, commonly known as ship-letters, be so amended as to make the postage chargeable on such letters conform to the new order of affairs established under the Convention of the Universal Postal Union.

It is very desirable, in view of the very general introduction of the postal card with paid reply in international exchanges, that early provision be made for the exchange of postal cards with paid reply with the other countries of the Universal Postal Union. The Postal Union countries which have taken advantage, to date, of the permission given in Article 14 of the Paris Convention to make mutual arrangements for the exchange of postal cards with paid reply are as follows: Argentine Republic, Austria-Hungary, Bahamas, Barbadoes, Belgium, British Guiana, British offices at Malta, Gibraltar, Tangier, Constantinople, Smyrna and Beyrout, United States of Colombia, Costa Rica, Cuba, Danish West Indies, Denmark, Dominican Republic, Faroe Islands, France, Gambia, Germany, Great Britain, Greece, Greenland, Hawaii, Honduras, Iceland, Italy, Jamaica, Lagos, Luxemburg, Netherlands, Netherlands Colonies in the East and West Indies, Netherlands Guiana, Norway, Paraguay, Porto Rico, Portugal, Roumania, Servia, Spain, St. Lucia, Sweden, Switzerland, Tobago, Turkey, and Uruguay. The Republics of Guatemala, Liberia, and Salvador, Persia and the Portuguese Colonies, admit such cards from Union countries which use them, but have not yet issued them. In Chili they are in use for domestic service only. It will thus be seen that a very large majority of the countries of the Postal Union participate in the advantages of an international exchange of postal cards with paid reply, while the United States is among the very few countries and colonies which do not take part in this exchange.

MAIL EXCHANGES WITH MEXICO.

It is gratifying to note, with reference to our postal intercourse with the neighboring Republic of Mexico, that as the result of a suggestion recently made by you to the Director General of Posts of Mexico, many Mexican destinations heretofore served with mails only by sea routes from the United States will now be reached through the overland exchanges, insuring much more rapid transit of mails by mail services organized on both sides over the newly constructed railways which connect the two countries at several points on the frontier. The interruptions of, and delays, in the mail communications, caused by the prevalence of yellow fever during the summer months, to which allusion was made in my report of last year, will thus be largely if not entirely remedied.

Detailed information on the following subjects relating to Postal Union exchanges will be found in statements hereto appended, marked C, D, E, and F, respectively.

1. Table of equivalents according to which postage rates are levied in those countries of the Universal Postal Union which have not the franc for a monetary unit, and the fees charged for registration and for return receipts.

2. A recapitulation of the regulations which determine, in the different countries of the Union, the length of time for retaining in the offices of destination unclaimed correspondence addressed "*poste-restante.*"

3. A recapitulation of the regulations within the Union respecting applications for the return of letters to the senders before their delivery to the addressees.

4. A statement of surtaxes charged in certain Postal Union countries on correspondence addressed to the United States.

JOSEPH H. BLACKFAN,
Superintendent.

Hon. W. Q. GRESHAM,
Postmaster-General.

REPORT OF THE CHIEF POST-OFFICE INSPECTOR.

POST-OFFICE DEPARTMENT,
OFFICE OF CHIEF POST-OFFICE INSPECTOR,
Washington, D. C., October 31, 1883.

SIR: I have the honor to hand you herewith a report of the Division of Mail Depredations and Post-Office Inspectors for the fiscal year ending June 30, 1883.

The members of the force have labored faithfully, and I trust that great good has resulted to the service from their endeavors. Special attention is invited to the report.

ARRESTS AND CONVICTIONS.

During the year arrests for violations of the postal laws, caused by post-office inspectors and others and reported to this office, numbered 596; 562 proceedings were brought in the Federal courts, and 34 in the courts of the several States in which the offenses were committed. In the United States courts 260 convictions were obtained and 74 offenders were acquitted, 8 escaped from custody, 4 died while awaiting trial, bail was forfeited in 5 cases, and 162 cases are still pending. In the State courts 17 convictions were had, 7 offenders were left to be dealt with by their employers, prosecution was abandoned in 1 case, and 9 await trial. The following tabulated statement will give a more complete summary of the arrests, and the cases growing out of them.

SUBJECT TO JURISDICTION OF UNITED STATES COURTS.

Classification of offenders.		Disposition of cases.	
Postmasters	50	Convicted	260
Assistant postmasters	26	Acquitted	74
Clerks in post-offices	21	Escaped from custody	8
Postal clerks and route agents	14	Forfeited bail	5
Letter-carriers	21	Proceedings dismissed	49
Mail-carriers	32	Awaiting trial	162
Other employés	4	Died awaiting trial	4
Burglars	68		
All others for various offenses	326		
Total	562	Total	562

SUBJECT TO JURISDICTION OF STATE COURTS.

All offenders	34	Convicted	17
		Turned over to employers	7
		Proceedings dismissed	1
		Awaiting trial	9
Total	34	Total	34

CASES ACTED UPON BY INSPECTORS.

The work of post-office inspectors grows out of depredations upon the mails, irregularities of all sorts, neglect of duty, inquiries of various kinds, examinations of special questions, and in general investigations of the practical workings of the Department, and securing a strict observance of its regulations.

The total number of cases referred to inspectors for investigation during the year was 47,736. These were divided into—

1. *Registered cases, Class A*, 7,941.—This class relates exclusively to complaints received of depredations upon the registered mail, both domestic and foreign. Since January 1 last, for the convenience of the office work, foreign complaints have been treated as a class by themselves, and will be specifically spoken of further on; for the present they are considered together to show the workings of the registry system as it appears from the point of view of this office. By foreign, is meant mail-matter going to or coming from foreign countries. There were 7,941 complaints received of alleged depredations upon, and all kinds of irregularities in the registered mail, embracing losses, rifling, wrong delivery, detention, suspected tampering and separation of the registered letter or packet from the registered package envelope. One thousand two hundred and twenty-eight letters containing valuable inclosures, and 1,269 contents not specified, were reported to this office for investigation on account of supposed depredations. One thousand and seventy-three letters were alleged to have been rifled, 32 to have been tampered with, 50 to have been wrongfully detained, and 76 to have been delivered to the wrong party; 219 registered packets (third and fourth class matter) were reported as having been lost, 319 to have become separated from the registered package envelope and supposed to have been lost.

Five thousand two hundred and eighty-nine of these complaints were investigated and reported upon during the year, with the following result:

Three thousand six hundred and thirty-nine letters and packets alleged to have been lost were found to have been delivered, or satisfactorily accounted for. In 170 cases of supposed rifling it was found that the charge was groundless. The writer, sometimes inadvertently, sometimes purposely, omitted to inclose the whole or a part of the remittance. In some cases the addressee received the contents and subsequently denied it. In a number of instances errors in counting gave rise to the claim of rifling. Twenty-two of the alleged detentions were satisfactorily explained; 19 cases of tampering were fully accounted for and resulted in no loss; 28 complaints of wrong delivery were shown to have been falsely made; in 205 cases of separation of the registered matter from the registered package envelope there was proven to have been no loss. The total actual losses as found by investigation amounted during the year to 418. These arose from different causes—robberies, destruction in the burning of post-offices and in railway accidents, losses by floods and other casualties, and from ordinary

thefts. There remain still under investigation 2,652 cases. If the proportionate loss should be as great in these as in the 5,289 cases reported upon, it would amount to 209. This sum added to 418, the actual loss, would give the total estimated loss during the year as 627. By comparing this figure with the total number of articles registered, 10,459,716, the safety of the registry system is readily shown.

There was recovered and restored to the owners money amounting in 679 registered cases to $15,947.52.

2. *Ordinary cases, Class B*, 34,712.—Complaints of depredations upon the ordinary mail are treated exclusively in this class; 29,908 ordinary letters were reported to have been lost, of which 15,137 were said to have contained valuable inclosures and 6,771 contents not stated. Of these 2,406 were found to have been delivered or accounted for. Ten thousand three hundred and ten ordinary packets were reported as lost, while 1,156 were proved to have been received. Four hundred and sixty-eight burglaries were committed on post-offices. This crime seems to be on the increase. Post-offices appear to be selected by burglars for their operations as a sure source of profit. Two hundred post-offices were burned; 19 mails were robbed by highwaymen. It is gratifying to note that losses from this crime are growing less frequent, not more than half the number being reported this year than were reported last. Fifteen mails were burned or destroyed in casualties to postal cars, and 39 were lost by mail carriers from a variety of causes; 28 mail pouches were stolen from depot platforms or baggage rooms. The amount of money recovered and restored to the owners in 40 ordinary cases was $321.61.

3. *Miscellaneous cases, Class C*, 5,083.—The work in this class of cases is constant. It includes the investigation of all varieties of complaints against postmasters and others in the service that are not strictly depredations upon the mails. The validity of the bonds and the responsibility of the sureties of postmasters at money-order offices and the inspection of accounts is also embraced in this class. The duty of assisting the contract office, too, is a part of this class of work. This has of late largely increased, especially in the western portions of the country, and much patience and time is required in these investigations in determining the utility of old post-routes and the practicability of new ones. Three hundred and sixty first and second class post-offices were inspected in detail during the year, with, it is hoped, very beneficial results. The amount of money collected on account of this class of cases from delinquent postmasters and others, and on account of fines and penalties, was $57,961.

4. *Foreign cases, Class F*, 6,379.—The whole number of complaints received and cases made up on alleged losses by mail between the United States and foreign countries during the fiscal year was 6,379. Of these 2,704 were ordinary and 3,675 registered. These complaints were both of foreign and domestic origin. One thousand three hundred and eighty inquiries originated with the British post-office department, 1,089 with the German, and 825 with other foreign postal administrations. Three thousand one hundred and twenty-four or nearly one-half of the whole number of complaints are of domestic origin. The number of foreign cases closed for the year is 4,848, of which 2,915 relate to registered articles and 1,928 to ordinary unregistered articles. Of the registered cases only 42 articles remained unaccounted for, while of the ordinary cases 1,267 were closed without the losses being located. The number of cases on hand awaiting replies from abroad is 813.

RECAPITULATION OF CASES REPORTED ON BY INSPECTORS DURING THE FISCAL YEAR ENDING JUNE 30, 1883.

Registered cases, including those referred in previous years	6,928
Ordinary cases, including those referred in previous years	30,382
Miscellaneous cases, including those referred in previous years	4,633
Foreign cases (since January 1, 1883)	3,403
Total	45,346

Very respectfully,

A. G. SHARP,
Chief Inspector.

Hon. W. Q. GRESHAM,
Postmaster-General, Washington, D. C.

REPORT OF THE AUDITOR OF THE TREASURY FOR THE POST-OFFICE DEPARTMENT.

OFFICE OF THE AUDITOR OF THE TREASURY
FOR THE POST-OFFICE DEPARTMENT,
Washington, D. C., November 8, 1883.

SIR: I have the honor to submit herewith the annual report of the receipts and expenditures of the Post-Office Department, as shown by the accounts of this office, for the fiscal year ending June 30, 1883.

REVENUE ACCOUNT OF THE POST-OFFICE DEPARTMENT.

Fiscal year 1883:		
The revenue of the Department for the fiscal year ended June 30, 1883, was		$45,508,692 61
The expenditures for the service of the year were		42,816,700 56
Excess of receipts		2,691,992 05
Amount of balances due from postmasters charged to "bad debt" and "compromise" accounts was	$39,663 08	
Amount of balances due postmasters to credit of "suspense" account	860 26	
		38,802 82
Balance available for the service of 1883		2,653,189 23
Fiscal year 1882:		
The balance available for the service of 1882 at the close of the last annual report was		1,696,310 05
The amount paid during the last fiscal year was		370,624 48
Balance available for the service of 1882		1,325,765 57
Fiscal year 1881:		
The balance available for the service of 1881 at the close of the last annual report was		119,556 07
The amount paid during the last fiscal year was		70,961 62
Balance available for the service of 1881		48,594 45
Fiscal year 1879 and prior years (claims):		
The balance available on this account September 30, 1882, as per last annual report, was		5,555 98
The amount paid during the last fiscal year was		3,376 34
Balance available September 30, 1883		2,179 64

Fiscal year 1880 and prior years (claims):		
The amount placed with the Treasurer under the act approved March 3, 1883 (Statutes, vol. 22, page 599), was		15,894 06
The amount appropriated by the act approved January 9, 1883 (Statutes, vol. 22, chap. 14, page 401), was		5,592 79
		21,416 85
The amount paid during the last fiscal year was		21,381 43
Balance available September 30, 1883		35 42

SUMMARY OF REVENUES AND EXPENDITURES.

Revenue of 1883		$45,508,692 61
Grant from the Treasury 1880 and prior years (claims)		15,824 06
Total receipts		45,524,516 67
Expenditures for 1883	$42,816,700 56	
Expenditures for 1882	370,524 48	
Expenditures for 1881	70,961 62	
Expenditures for 1879 and prior years	3,376 34	
Expenditures for 1880 and prior years	21,381 43	
Total expenditures		43,282,944 43
		2,241,572 24
Net amount charged to "bad debt" and "compromise" accounts during the year, less credits to "suspense"		38,802 82
Excess of receipts		2,202,769 42

Of the amount charged to "bad debts" and "compromise" accounts, the sum of $36,598.49 accrued in previous years, the review of the ledgers having been continued during the years from 1856 to 1871.

The balance standing to the credit of the general revenue account at the close of the fiscal year 1882, was		$5,240,333 15
Excess of receipts during last fiscal year brought down		2,202,769 42
Balance to the credit of the revenue account at the close of the fiscal year ended June 30, 1883		7,443,102 57
Due by late postmasters { accounts in suit	$210,429 08	
Due by late postmasters { accounts not in suit	145,383 06	
		355,812 14
		7,087,290 43

DEFICIENCY ACCOUNT.

The amount appropriated from the general Treasury to supply deficiencies in the revenues of the Post-Office Department for the fiscal year ended June 30, 1883, was	$1,902,177 90
The amount remaining undrawn, there being no deficiency, is	1,902,177 90

POSTMASTERS' QUARTERLY ACCOUNTS-CURRENT.

The net revenues of the Department from postages, being the aggregate revenues at post-offices for the fiscal year, less the compensation of postmasters and clerks and the contingent office expenses, were:

For the quarter ended September 30, 1882	$6,972,237 97
For the quarter ended December 31, 1882	7,813,390 35
For the quarter ended March 31, 1883	7,952,757 89
For the quarter ended June 30, 1883	6,920,761 60
Total	29,659,147 81

The number of quarterly returns of postmasters received and audited, on which the above sum was found due the United States, was:

For the quarter ended September 30, 1882	46,028
For the quarter ended December 31, 1882	46,278
For the quarter ended March 31, 1883	47,371
For the quarter ended June 30, 1883	47,093
Total	186,770

STAMPS SOLD.

The amount of stamps, stamped envelopes and wrappers, newspaper and periodical stamps, and postal cards sold, was:

For the quarter ended September 30, 1882	$10,064,809 37
For the quarter ended December 31, 1882	11,017,096 41
For the quarter ended March 31, 1883	11,325,618 05
For the quarter ended June 30, 1883	10,606,519 75
Total	43,014,043 58

The amount of official stamps furnished the different Departments, included in the above amount of stamps sold, was:

For the State Department	$2,500 00	
For the War Department	125,242 85	
For the Interior Department	14,998 71	
For the Department of Agriculture	2,357 55	
For the Navy Department	45 00	
Total official stamps		145,144 11
Total ordinary stamps sold		42,868,899 47

LETTER POSTAGES.

The amount of postage paid in money was		$146,219 35
Included in the above amount are the following sums paid by foreign countries in the adjustment of their accounts:		
Kingdom of Great Britain and Ireland	$120,142 54	
Dominion of Canada	17,674 50	
Empire of Japan	4,563 10	
Kingdom of Spain	524 94	
Colony of New South Wales	253 15	
Kingdom of Norway	101 90	
Republic of Switzerland	39 18	
Colony of Queensland	26 57	
Postal administration of British Honduras	598 00	
Postal administration of Victoria	369 83	
Postal administration of Curaçoa	121 88	
Postal administration of Hong-Kong	85 31	
Postal administration of the Bahamas	220 65	
		144,721 55
Balance collected by postmasters		1,497 80

The following balances were paid and charged to the appropriation for—

BALANCES DUE FOREIGN COUNTRIES.

Service of 1883:		
Empire of Germany	$4,401 48	
Kingdom of Belgium	8,068 23	
Republic of France	2,088 15	
Kingdom of Denmark	2,608 47	
Kingdom of Roumania	148 54	
Empire of Austria	291 31	
Kingdom of Italy	2,050 43	
Kingdom of Sweden	626 58	
Empire of Brazil	152 81	
Colony of St. Thomas	376 95	
International Bureau, Berne, Switzerland	667 47	
Total, 1883		$21,430 42

Service of previous years:		
Empire of Germany	$4,401 48	
Kingdom of Belgium	8,068 23	
Republic of France	2,088 15	
Kingdom of Denmark	2,607 47	
Kingdom of Roumania	148 54	
Empire of Austria	881 07	
Kingdom of Italy	2,050 43	
Kingdom of Sweden	626 58	
Empire of Brazil	458 43	
Principality of Bulgaria	303 30	
Colony of St. Thomas	1,130 84	
International Bureau, Berne, Switzerland	20 00	
Total for previous years		$22,785 52
Aggregate amount paid		44,265 94

MAIL TRANSPORTATION.

The amount charged to transportation accrued and placed to the credit of mail contractors and others for mail transportation during the fiscal year was—

For the regular supply of mail routes	$19,598,410 36
For the supply of "special" offices	37,733 33
For the supply of "mail messenger" offices	764,426 10
For the salaries of railway postal clerks	3,691,272 38
For the salaries and expenses of the superintendents of the railway mail service	47,066 20
Total	24,138,908 37

FOREIGN MAIL TRANSPORTATION.

New York to Great Britain and Ireland, and countries beyond, via Great Britain	$178,875 39	
New York to Great Britain and Ireland, and Germany, and countries beyond	55,876 95	
Philadelphia to Great Britain and Ireland	3,006 37	
Boston to Great Britain and Ireland	644 79	
Post-office Department of Canada, English mail	192 82	
New York, Baltimore, Philadelphia, Boston, Key West, New Orleans, San Francisco, and Galveston, to West Indies, Central and South America, Mexico, &c., &c.	32,030 84	
New York to Newfoundland	32 78	
Boston to Nova Scotia	277 38	
Eastport to New Brunswick	19 37	
Baltimore to Bremen	25 72	
Upper coast, local mail, Pacific	1,125 26	
San Francisco to China, Japan, Farther India, Australia, and South Sea Islands	20,216 33	
Expenses of Government mail agent at Panama	240 00	
Expenses of Government mail agent at Shanghai	1,000 00	
		$293,564 00
Total		24,432,472 37
The amount credited to transportation accrued and charged to mail contractors for over credits, being for "fines and deductions," was		213,162 69
Net amount of transportation accrued		24,219,309 68
The amount paid during the year was		23,167,227 85
Excess of transportation accrued, not paid		1,052,081 83

PACIFIC RAILROAD ACCOUNT.

Included in the above amount of transportation accrued are the following balances accrued for the transportation of the mails over Pacific railroads, certified to the Register of the Treasury under instructions of the Secretary, dated June 27, 1883. The amounts are not included in the expenditures of the Post-Office Department (see Statutes, vol. 20, page 420).

Regular service, 1883:		
Union Pacific Railway Company (old U. P. R. R. line)	$448,611 69	
Union Pacific Railway Company (old Kans. Pac. line)	70,137 08	
Central Pacific Railroad Company	280,573 56	
Sioux City and Pacific Railroad Company	9,496 46	
		$808,818 79
Use of postal cars, 1883:		
Union Pacific Railway Company (old U. P. R. R. line)	61,027 90	
Union Pacific Railway Company (old Kans. Pac. line)	8,719 25	
Central Pacific Railroad Company	37,144 28	
		106,891 43
Total certified for service of 1883		915,710 22
Regular service of previous years:		
Central Pacific Railroad Company	143 41	
Use of postal cars, previous years:		
Union Pacific Railway Company (old U. P. R. R. line)	14 66	
Total certified for service of previous years		158 07
		915,868 29

STATEMENT OF THE CONDITION OF ACCOUNTS OF LATE POSTMASTERS.

Balance due the United States brought forward from last report		$471,031 43
Balance due the United States on account of postmasters becoming late during the fiscal year		127,425 55
		598,456 98
Amount collected during the year	$176,075 29	
Amount charged to "suspense"	26,906 47	
Amount charged to "bad and compromise debts"	39,663 08	
		242,644 84
Balance remaining due United States		355,812 14
Of which there is in suit	210,429 08	
Not in suit	145,383 06	
		355,812 14
Balance due late postmasters brought forward from last report	47,493 84	
Amount becoming due during the fiscal year	160,010 31	
		207,504 15
Amount paid during the year	57,101 09	
Amount credited to "suspense"	27,766 73	
		84,867 82
Balance remaining due late postmasters		122,636 33
Amount in suit June 30, 1882		245,202 83
Amount submitted for suit during the fiscal year		12,166 30
		257,369 13
Of which there was collected during the year	12,378 39	
Amount otherwise settled	34,561 66	
		46,940 05
Balance remaining in suit		210,429 08
Amount of interest and costs collected in suit against late postmasters and sureties, on postal accounts		1,492 36

Statement of the net revenue derived from the domestic money-order transactions for the year ended June 30, 1883, and of the international money-order transactions for the year ended June 30, 1882.

Revenue accrued on domestic money-order transactions, 1883		$311,704 67
Revenue accrued on international money-order transactions:		
Revenue accrued on Canadian transactions for 1882	$9,841 56	
Revenue accrued on British transactions for 1882	44,090 14	
Revenue accrued on German transactions for 1882	29,593 41	
Revenue accrued on Swiss transactions for 1882	3,784 30	
Revenue accrued on Italian transactions for 1882	10,994 75	
Revenue accrued on French transactions for 1882	1,559 29	
Revenue accrued on New Zealand transactions for 1882	59 84	
	99,923 29	
Less loss on international money-order transactions with—		
Jamaica for 1882	$0 13	
New South Wales for 1882	6 78	
Victoria for 1882	1 68	
	8 59	
Total international		99,914 70
Total net revenue paid to postal account		411,619 37

Statement exhibiting quarterly the receipts of the Post-Office Department, under their several heads, for the fiscal year ended June 30, 1883.

Accounts.	Quarter ended September 30, 1882.	Quarter ended December 31, 1882.	Quarter ended March 31, 1883.	Quarter ended June 30, 1883.	Aggregate.
Letter postage	$21,189 87	$950 34	$99,015 77	$25,063 37	$146,219 35
Box rents and branch offices	448,821 54	454,105 22	477,729 91	501,408 24	1,882,064 91
Fines and penalties	1,083 40	2,344 06	1,576 79	4,747 99	9,752 24
Postage-stamps, stamped envelopes and wrappers, and postal cards	10,004,809 37	11,017,096 41	11,325,618 05	10,606,519 75	43,014,043 58
Dead letters	1,587 27	6,256 68	1,471 75	2,964 13	12,279 83
Revenue from money-order business				411,619 37	411,619 37
Miscellaneous	8,441 50	7,294 07	6,964 05	10,013 11	32,713 33
Total	10,545,932 95	11,488,046 78	11,912,376 92	11,562,335 96	45,508,082 61

Amount allowed to postmasters at the principal post-offices credited in quarterly accounts current, for incidental office expenses, such as repairs, gas-fixtures, telegrams, &c.:

Third quarter, 1882		$16,756 19
Fourth quarter, 1882		19,620 81
First quarter, 1883		14,904 99
Second quarter, 1883		17,378 21
Total		68,660 20
Amount paid by warrant	$169 27	
Amount allowed postmasters and others credited on general accounts	2,885 49	
		3,054 76
Total amount paid on account of miscellaneous, First Assistant Postmaster-General		71,714 96

No. 12.—*Statement showing the receipts of the money-order offices of the United States during the fiscal year ended June 30, 1883.*

RECEIPTS.

Balance in the hands of postmasters June 30, 1882		$1,511,549 21
Amount received for domestic money-orders issued	$117,329,406 31	
Amount received for Canadian international money-orders issued	1,016,598 62	
Amount received for British international money-orders issued	3,194,126 64	
Amount received for German international money-orders issued	2,450,969 43	
Amount received for Swiss international money-orders issued	272,512 83	
Amount received for Italian international money-orders issued	640,035 35	
Amount received for French international money-orders issued	121,805 30	
Amount received for Jamaica international money-orders issued	2,628 62	
Amount received for New Zealand international money-orders issued	4,837 41	
Amount received for New South Wales international money-orders issued	2,804 47	
Amount received for Victoria international money-orders issued	2,675 35	
Amount received for Belgium international money-orders issued	7,863 74	
Amount received for Tasmania international money-orders issued	91 52	
Amount received for India international money-orders issued	882 83	
Total issued		125,047,238 42
Amount received for fees on domestic money-orders issued	1,101,821 80	
Amount received for fees on Canadian international money-orders issued	17,341 70	
Amount received for fees on British international money-orders issued	91,205 50	
Amount received for fees on German international money-orders issued	44,249 10	
Amount received for fees on Swiss international money-orders issued	4,631 20	
Amount received for fees on Italian international money-orders issued	10,190 25	
Amount received for fees on French international money-orders issued	2,221 40	
Amount received for fees on Jamaica international money-orders issued	46 50	
Amount received for fees on New Zealand international money-orders issued	82 20	
Amount received for fees on New South Wales international money-orders issued	50 30	
Amount received for fees on Victoria international money-orders issued	47 10	
Amount received for fees on Belgium international money-orders issued	136 30	
Amount received for fees on Tasmania international money-orders issued	1 70	
Amount received for fees on India international money-orders issued	35 55	
Total fees		1,272,060 60
Amount received for premiums, &c. (premiums, $437.93—profit, $578.69)		1,016 62
Amount received for deposits		94,929,020 91
Amount of drafts drawn on the postmaster at New York, N. Y.		10,945,687 55
Amount transferred from postage fund		934,516 74
Amount overpaid by postmasters		14,675 25
Total receipts		$234,155,795 21

In submitting the foregoing statements I am prompted to add one or two suggestions. This Bureau depends upon the Treasury for its working force, while its working quarters are in the Post-Office Department building, and in the new building used for the money-order business. In the near future the Post-Office Department will need the room in the Post-Office building, now occupied by the Auditor of the Treasury for the Post-Office Department. The new building is not large enough to accommodate the clerks now required to settle the money-order accounts, and there is no space in it for the proper storage of the files and books in current use. The narrow hallways are occupied with casing for this purpose, after removing tons of books to the hallways of the Post-Office Department building. There is immediate need for additional room to accommodate the money-order division of this office, and I venture the suggestion that, on the square where the new leased building is located, is the convenient and proper place for a building which should be made large enough to accommodate the Auditor's office. The old money-order guard books, and money-order vouchers are now occupying a great deal of storage room. They contain the record evidence relating to unpaid money-orders from the commencement of the system. The cost of copying this evidence and verifying it will be much more than is ever likely to be required for the payment of orders outstanding over five years. To prevent further accumulation of these books and papers, and to avoid the cost of making copies relating to those unpaid, I would suggest the procurement of legislation making void all money-orders unpaid and outstanding for more than six years, and providing that all orders heretofore issued and outstanding for more than six years when presented for payment be reported to Congress for an appropriation.

Respectfully,

J. H. ELA,
Auditar.

Hon. W. Q. GRESHAM,
Postmaster-General.

REPORT

OF

THE COMMISSIONER OF AGRICULTURE.

DEPARTMENT OF AGRICULTURE,
Washington, D. C., November 10, 1883.

To the PRESIDENT:

I respectfully submit a statement of the work done in the Department of Agriculture during the year 1883.

I have thought it advisable to continue the policy laid down early in my service as Commissioner, of establishing as intimate relations as possible between the Department and the associations and institutions of the country which are devoted to the development and improvement of the art of agriculture, and of calling around the Department those whose knowledge and influence have given them especial authority in the various sections of the country. The beneficial effects of this course are already manifest. To every call of the Department for information and advice, the colleges and societies have responded promptly and liberally. Representatives of many of them assembled at the Department in January last, and presented a large amount of valuable information upon the practical questions of agriculture, and the various methods of imparting agricultural instruction, and of improving the social condition of the American farmers,—a carefully prepared and elaborate report of which has been issued by the Department. The work of obtaining reliable and useful information upon the various matters provided for by appropriations has been submitted, as far as practicable, to competent agents, who have furnished from actual observation and from extensive correspondence a vast amount of interesting and useful facts, from which it is believed important conclusions may ultimately be drawn. Investigations conducted in this manner concerning the cultivation and use of sugar-producing plants, and into the condition, increase, and preservation of our forests, have given most satisfactory results, and have brought the divisions devoted to these matters into most immediate connection with those who are actually engaged in these branches of industry. The employment of a carefully selected corps of agents and correspondents in the States and Territories, for the collection of statistical returns and statements in relation to the condition of crops, the animal industry,

rates of transportation, the markets, the products of the dairy, both at home and abroad, has given the Statistical Division of the Department, under its present experienced and efficient head, a reputation which is highly esteemed by those who understand the value of this information, and is accepted as sound and reliable by producers and consumers in our own country and by the best authorities in Europe. By this policy I have been enabled to secure most valuable reports of the exhibition of animals at Hamburg, and of the deliberations of the Veterinary Congress at Amsterdam, which will be submitted to Congress at an early day, and will form an important part of the investigations now being made into the condition of our animal industry and the subject of contagious diseases. In establishing this mode of rendering the Department as efficient and useful as possible, I have considered that its service is largely co-operative, and that it should constitute a receptacle into which all valuable information can be gathered and from which it can be distributed for the benefit of the agricultural community. The following condensed statements of the work performed by the various divisions of the Department will give the work of the Department in detail.

DIVISION OF GARDENS AND GROUNDS.

The distribution of plants propagated in the glass houses and grounds of the Department has, as usual, been quite extensive, considering the amount of space now available for this purpose. The grounds available for cultural purposes are yearly becoming more limited on account of the extension of buildings necessary for the use of the Department. With a view to increase the facilities of house propagation, a new greenhouse has just been erected. This structure is one hundred and fifty feet in length and twenty-four feet in width, built of the best materials, and specially arranged for the purposes for which it is to be employed. Attached to it are hot-beds comprising eighteen hundred square feet of surface, for the accommodation of young plants. The whole is effectually heated by steam, on a somewhat new plan, and it is found to be admirably adapted for the maintenance of a high degree of artificial temperature. The Japan persimmon, which has been extensively distributed by this Department, is proving to be a valuable addition to our list of fruits. The range of climate to which it may be adapted has not yet been fully ascertained, but large fruits have been ripened in this District, also in Southern New Jersey. The appropriation for continuing the culture of the tea-plant having been exhausted, a large quantity of surplus plants have been distributed. The plantation set out is sufficiently extensive for all experimental purposes, if means are provided for its continuance. To those familiar with this culture it is not expected that much can be proven to show that it can be commercially profitable. The climatic conditions are not favorable for it. The want of a proper amount of rainfall during summer is fatal to its extensive production for market, although it can be produced as

a domestic article, where profit is no object, over a large territory; and to this end thousands of plants are yearly distributed in districts where the winters are not severe enough to destroy the plant. The demand for orange plants, and others of what are designated as semi-tropical, is never failing. To supply this demand a new importation of the Citrus family has been secured. These will first be tested here before they are propagated to any extent, as has been done heretofore with fruits of this kind. The best oranges now raised in California are produced from the progeny of plants originally imported by this Department from Brazil, and subsequently disseminated in that and other States. An erroneous opinion prevails in regard to the objects of the distributions. Letters are constantly received inclosing the most extensive requirements for trees and plants of all kinds. No single plant establishment in the world could supply these orders, and many articles are called for which can be of no value to those requesting them, even could they be procured. It is the constant aim of the Department to introduce everything which indicates the possession of even the slightest possible value as compared with present productions, and it is on the alert that nothing of prospective value be overlooked.

BOTANICAL DIVISION.

During the year past numerous and important additions have been made both to the herbarium and botanical library. A number of zealous botanical collectors have been engaged in exploring the vegetation of the new and undeveloped portions of our country, with the result of increasing our knowledge of the flora of those regions and bringing to light many new and interesting species. These specimens, many of which we have secured, include representations of trees, shrubs, herbs, grasses, and all kinds of vegetation. A careful study of our native grasses, with reference to a determination of such as give promise of greater utility for meadows and grazing purposes, has been prosecuted. To aid in this work I have endeavored to encourage intelligent observations, by practical farmers and cultivators, of the various grasses of their respective localities, together with experiments in the cultivation of promising species. I have also continued and brought to a close the series of articles upon grasses for the Annual Report. During the year, this division has sent several large boxes and packages to foreign countries, to London, Paris, St. Petersburg, and to Austria. It has also continued its distributions to agricultural colleges and institutions of learning in this country as follows: To the University of the Pacific, San José, Cal.; to the Agricultural and Mechanical College of Texas, at College Station; to the University of North Carolina, Chapel Hill; to the Industrial University of Arkansas, Fayetteville; to the University of Minnesota, Minneapolis; to the Colorado Agricultural College, Fort Collins; to several other public and private institutions of learning, and to scientific investigators and correspondents. Some additions

have been made to the museum of the Department, and it is constantly visited by thousands of citizens and strangers, who are always pleased and instructed by the large collection of objects connected more or less intimately with the subjects of agriculture and general industry. The botanical library is now quite extensive, embracing about six hundred volumes of standard works of reference, both foreign and domestic, and furnishes an excellent opportunity for consultation by professors, teachers, and specialists in this line of research.

One of the greatest wants of agriculture in some parts of the country is the need of suitable grasses for hay and pasturage. Here is a field for practical and extended observation by the botanist, which, in view of its importance, would warrant the outlay of thousands of dollars. Much good has been accomplished by the inquiries which have been made in this matter through correspondence and the transmission of specimens to the office. But much more could be accomplished by field observations. Wide examination should be had of the range and habits of the native grasses of the desert or arid regions, in order to utilize the best and most promising for agricultural purposes. The same observation is needed as to the adaptation of foreign grasses and forage plants to the climate and soil of this country, or particular portions of it. The information thus obtained should be extensively spread before farmers, agriculturists, and stock-raisers, and they should be encouraged and assisted in making experiments with such new varieties as give promise of benefit. In view of the magnitude of the interests involved, it would be advantageous and proper that the botanist should investigate and study this question in the field for several months of the year.

There is another consideration calling for field-work; there are certain plants, trees, &c., which are rare and confined to very restricted areas, sometimes in remote places out of the range of ordinary botanical collectors, of which there is no representation in the herbarium, and to obtain specimens of which it is almost indispensable that the botanist should look for them in the field. By this means the herbarium will sooner reach its proper purpose of being an exponent of *all* the vegetable productions of the country, with the characters and habits of which the Botanical Division should have the means of an acquaintance.

MICROSCOPIC DIVISION.

The work of the Microscopic Division for the past year has consisted chiefly in making investigations of parasitic fungi which cause the blight of plants, fruits, and cereals. Owing to the unusual character of atmospheric conditions throughout the United States during the past season, fruit trees, grapevines, cereals, and plants generally have suffered seriously, in some instances from severe drought, and in other cases from excessive rains. In some localities fungoid diseases have appeared where they had not been hitherto observed, while in others they have materially increased. The Department is in receipt of many

letters from agriculturists, fruit-growers, and others with regard to plant diseases generally caused by cryptogamic fungi, directly or indirectly. Several varieties of grapevines in cultivated orchards have been injuriously affected both by drought and excessive rain. Apple and peach orchards have also suffered from the same cause. The object of these microscopical investigations is to discover to what class of pernicious natural influences, produced under unfavorable atmospheric conditions, may be attributed the destruction of crops, and to discover what remedies may be profitably employed as correctives in each individual case. Other important investigations have been made by the microscopist relating to the discovery of new parasitic diseases, accounts of which will be submitted in future reports.

CHEMICAL DIVISION.

The principal work of this division the past year has been an examination of American cereals, being a continuation of work done in previous years, and an introduction to an extended investigation of this subject which it is proposed to carry on. The results already obtained have been published in a special report of the Department, and are of interest as showing the effect of environment, and especially of soil and climate, upon the composition of the grain. A study of the milling products of wheat will soon be in progress for the purpose of comparing the value of different wheats as flour producers, and determining the relative effect of different processes of milling upon the composition and nutritive value of the products. An examination of flours of as different origin as possible will be made, with the idea of showing where the best may be obtained, and how important it is for economical reasons that the best should be used. From the interest which has already been shown by the farmers and millers of the country, it is believed that the results will be of great importance both to them and to the consumer. The other work of the division consisted of the analyses of several grasses at different stages of development as a conclusion of work of a previous year, the analyses of a large number of the fruits and vegetables of our markets, and of several of the commoner ones at intervals in their growth. Several minor investigations, of which it is unnecessary to speak here, were carried on, and a large number of examinations and analyses of waters, marls, and other substances of agricultural interest were made. The results will appear in the Annual Report of the Department for 1883.

INVESTIGATION OF SORGHUM.

The investigation of the sorghum plant during the past year has been directed in the following lines:

1. The manufacture of sugar from the canes and determination of the yield per ton.

2. Experiments in extracting the juice from the canes by diffusion.

These were highly successful. The increased yield of this method over milling has been found to be between 25 and 30 per cent.

3. Experiments in defecation. The most important of these has been the method (used in Europe for sugar beets) of treating the juice with an excess of lime and afterwards removing this excess by carbonic acid. The results of the experiments have been, in the main, satisfactory. The results have been much better with mill juice, than with juice obtained by diffusion. This process promises to be of so great value to the sugar interest that it is highly important the experiments be continued on a larger scale next year.

4. Separation of sucrose from molasses by barium, lime, and strontium. This work has not yet been done, but is an essential part of the plan of the year's work. It will be undertaken at once, when the grinding season of the cane is over.

AMERICAN BUTTERS AND THEIR ADULTERATIONS.

No thorough investigation of the butters of the country has ever been made, and this investigation was undertaken by the division in order to aid the dairy interest in establishing a standard of good butter and to protect the consumers against fraud. About forty butters, from differents parts of the country, have been examined up to the present time. Of butter adulterants, examinations have been made of lard, tallow, oleomargarine, and cotton-seed oil. The following are the points to which the investigation is chiefly directed:

1. To determine the average quantity of soluble fat-acid (butyric acid).

2. To determine the average amount of water and salt in the butters of commerce.

3. To determine the influence of the different breeds of cattle on the composition of the butter.

4. To determine the influence of different kinds of food and climatic conditions on the quality of the butter.

5. To determine the extent and kind of adulteration and the best method of detecting it.

ENTOMOLOGICAL DIVISION.

The Entomologist has been active in improving the efficiency of this division and in carrying on important field investigations and experiments. The outside or field work has included, among other things, continued study of the insects affecting the orange tree in Florida, and the remedies discovered and recommended are being very generally used and appreciated. Observations on the cotton-worm have been continued in Alabama and Texas, and further experiments with machinery devised for its destruction have been made. Exploration of the breeding grounds of the Rocky Mountain locust, or destructive grasshopper

of the West, have warranted Professor Riley in concluding that the prospect of immunity from its ravages in 1884 is as bright as it has been at any time since 1878. As the southern and western portions of the country have claimed most of the attention of the division for some years past, it has lately given more attention to those insects which injuriously affect northern crops.

The serious ravages of grasshoppers in the Merrimac Valley, New Hampshire, have received careful attention and with the most satisfactory results, as shown by the correspondence of the Department. The death of spruce and larch forests in New England has also been investigated, and the causes satisfactorily ascertained. A final solution of the problem was very desirable, as many conflicting views were held. The insects injurious to the hop-vine and to the cranberry have also been specially studied, while a series of experiments made with a view of protecting fruit and shade trees from leaf-feeding species have been fruitful of useful results. In the investigations that are being made of those insects which injure the cotton plant, the orange and the sugar-cane, the Entomologist has felt the need of more accurate information than was on record of such as affect those crops in Brazil, and which are common to that country and the United States. Mr. John C. Brauner and Mr. Albert Koebele were, therefore, commissioned to proceed to Brazil with instructions to study these various subjects. Their studies have resulted in much important information. Though the phyloxera is less injurious to our American vines than to those of Europe, yet everything pertaining to it has an especial interest. It gives me pleasure to state that the Entomologist has during the year made some interesting discoveries in its life habits, and that experiments with petroleum emulsions, which have not hitherto been used against it, indicate that such emulsions afford one of the cheapest and most effective remedies yet discovered. A large number of silk-worm eggs have been distributed, and liberal quantities of pyrethrum seed have been supplied to correspondents. Reports show encouraging results from the efforts of the Department to introduce and establish the cultivation of this valuable plant. The report of the Entomologist treats of these and other subjects, and also contains the results of late work on the worms that so seriously affect the cabbage crop. The office work and the correspondence of the division increase with the growing interest which our farmers manifest in the subject of economic entomology.

DIVISION OF STATISTICS.

This division has never done better work than in the past year. It has advanced its standing for accuracy and breadth, in this and in foreign countries. Its aim is in direct contrast with the prevalent haste and superficiality of the day, towards completeness and fullness of statement, a true parallelism in comparison, and legitimacy in deduc-

tion. In agricultural statistics the effort has been unremitted to obtain the best results, by methods new and old, not only in crop production, its changing areas and fluctuating yields, but in the progress of enlightened agriculture, in science applied to rural arts, in the distribution of the products of the earth, the cost of their transportation, the commercial aspects of such distribution, and the resulting interdependence and correlation of all industries. The division has had the co-operation of State officials and State boards of agriculture, by which unity of results between the various official systems of crop statistics has been practically attained, to the advantage of all, and the promotion of public confidence in the substantial verity of reported results. Where no official State organization has been in existence, the statistical agent of the Department has organized a system of correspondence, to corroborate and supplement the work of the regular Department corps of county correspondents. The voluntary work of all these local assistants is thankfully acknowledged.

During the past year the division has extended its work to Europe, with an office in London, its agent being also deputy consul-general at that point, with good results as a beginning of a difficult work and high promise of future improvement. In wheat, corn, cotton, wines, oils, beef and pork products, the interests of the country are now so large and so affected by competing production of foreign nations, that this enlargement has been found absolutely necessary. In accordance with the requirement of Congress, there has also been added to this division a section of railroad statistics, charged especially with the duty of noting and co-ordinating the rates of transportation by land and water, with their changes and fluctuations. This work has been successfully initiated, and the railroads have generally furnished promptly the data required. Special investigation has been made during the year of the influence of American competition upon European agriculture. The statistics of the dairy have also demanded attention; the history of the progress of sorghum growing; the advance in economical meat production and early maturity of beeves; with investigations in various directions, for the use of the Department, for legislators, commercial organizations, and publicists.

The crops of the year 1883, as indicated by the returns of the Division of Statistics, will be sufficient for the wants of the country, and for an average measure of supply of deficient production of European countries. There was a large increase in the breadth of corn, due to the high prices of the last year. It encountered a period of excessive moisture and low temperature, followed by a summer of deficient rain-fall, resulting in a crop averaging scarcely more than 23 bushels per acre. As this is the third successive crop below the average yield of 26 bushels, the price continues high, and seems almost extreme, after a remarkable period of six successive years of yield above 26 bushels, in which the average price declined from 64.7 to 31.8 cents per bushel. The No-

vember estimate was 1,577,000,000 bushels. The winter-wheat crop was still more unfortunate, suffering severely by the alternations of frost and thaw in early spring. The spring wheat crop was good, yet the average yield of spring and winter wheat was but 11 bushels per acre, a reduction of nearly a hundred million bushels from the large product of 1882. The crop of oats was unusually large, barley medium, rye below average, and buckwheat seriously injured by the frost. Cotton is not yet fully harvested, but it is certain that the crop will be short, probably a million bales less than that of 1882, which was nearly seven million bales, as indicated in the report of last October, and verified by the cotton movement. Yet the present crop has only been exceeded twice in the history of cotton-growing, namely, in 1880 and 1882. The potato crop will be the largest since 1875, yielding not less than one hundred and ninety-five million bushels, of high quality, with little loss from rot. The results of the season's production may, on the whole, be considered successful and encouraging.

VETERINARY DIVISION.

The material portions of the report of the Veterinarian of the Department, and the results of the experiments and investigations of those employed under his direction, will be found in this volume. The report in its entirety, containing the results of the experiments of all those engaged in the investigation of contagious diseases of domestic animals, together with much valuable information voluntarily contributed by those interested in such matters, has been published by the Department in a separate volume containing over two hundred and seventy pages.

I have established near this city an experiment station for the investigation of contagious diseases of domestic animals. D. E. Salmon, D. V. M., who has been in the employ of the Department for a number of years, has been placed in charge of this station. One of the most important objects of this investigation is to test the practicability of a system of vaccination as a preventive for some of our most wide-spread and destructive diseases. The virus of swine plague has been successfully cultivated and attenuated, but it will require further investigation to determine its protective influence, and the danger, if any, attending its use. Very limited outbreaks of disease, supposed to be contagious pleuro-pneumonia, have been reported from Connecticut, Pennsylvania, and Maryland, each of which has been investigated by the Veterinarian, and will be fully described in his next report. While Texas or southern fever of cattle has not been so destructive in Virginia as last year, it has proved very disastrous in many other localities. During the year outbreaks of this disease were reported as prevailing in Pennsylvania, in Maryland, at Charlottesville and Norfolk, Va.; in Pawnee, Harper, and Barbour Counties, Kansas; in many places in northern Georgia and southern Tennessee, and at Fort Davis, Texas.

DEPARTMENTAL REPORTS.

The usual number of 300,000 copies of my Annual Report for the years 1881–'82 were ordered printed by resolution of Congress. Since that work went to press the following additional special and miscellaneous reports have been printed by the Department:

	No. copies printed.
No. 53. Report upon the product and price of principal crops of 1882; also, freight rates of transportation companies, including changes of the winter tariff. December, 1882, 77 pp., octavo	11,500
No. 54. Sorghum sugar industry. Address of the Hon. George B. Loring before the Mississippi Valley Cane-Growers' Association, Saint Louis, Mo., December 14, 1882. 19 pp., octavo	11,000
No. 55. The Grange: Its origin, progress, and educational purposes, by Hon. D. Wyatt Aiken, of South Carolina. 18 pp., octavo	11,000
No. 56. Report upon numbers and values of farm animals, of product and quality of cotton, and comparative values of American and European farm implements. Also, rates of transportation in Europe and America. February, 1883, 74 pp., octavo	11,000
No. 57. Report on the distribution and consumption of corn and wheat, and the rates of transportation of farm products. March, 1883, 39 pp., octavo	11,000
No. 58. Report on the area and condition of winter wheat, and the condition of farm animals; also spring rates of transportation of farm products. April, 1883, 46 pp., octavo	11,000
No. 59. Report of the condition of winter grain, the progress of cotton-planting, and estimates of cereals of 1882, with freight rates of transportation companies. May, 1883, 65 pp., octavo	10,000
No. 60. Report of average of spring grain and cotton, the condition of winter wheat, and European grain prospects, with freight rates of transportation companies. June, 1883, 56 pp., octavo	11,000
No. 61. Report on the area of corn, potatoes, and tobacco, and the condition of growing crops in the United States and Europe, with a report on rates of transportation. July, 1883, 44 pp., octavo	11,000
No. 62. Observations on the soils and products of Florida. By William Saunders, Superintendent of Gardens and Grounds. 30 pp., octavo	12,000
No. 63. The grasses of the United States: being a synopsis of the tribes and genera, with discriptions of the genera, and a list of the species. By Dr. George Vasey. 47 pp., octavo	12,000
No. 64. Report of the condition of crops, "American competition," and freight rates of transportation companies. August, 1883, 80 pp., octavo.	11,000
No. 65. Report of the condition of crops, and on freight rates of transportation companies. September, 1883, 55 pp., octavo	11,000
No. 1. New Series Statistical Division. Report on condition of crops, yield of grain per acre, and on freight rates of transportation companies. October, 1883, 28 pp., octavo	11,000
Area and product of cereals grown in 1879, as returned by the Census of 1880.97 pp., octavo	10,000
Report on jute culture, and the importance of the industry. By Prof. S. Watterhouse. 21 pp., octavo	5,000
Report on forestry. Vol. 3, 318 pp., octavo	1,000
Encouragement to the sorghum and beet-sugar industry: A record of practical experiments conducted under the direction of the Commissioner of Agriculture. 1883, 64 pp., octavo	5,000

	No. copies printed.
Bulletin No. 1. Chemical Division. An investigation of the composition of American wheat and corn. 1883, 69 pp., octavo	5,000
Preliminary report on the forestry of the Mississippi Valley, and tree-planting on the plains. 1883, 45 pp., octavo	5,000
Results of field experiments with various fertilizers. By Prof. W. O. Atwater, Ph. D. 1883, 183 pp., octavo	2,000
Bulletin No. 1, second edition. Division of Entomology. Reports of experiments, chiefly with kerosene, upon the insects injuriously affecting the orange tree and the cotton-plant, made under the direction of the Entomologist. 1883, 62 pp., octavo	1,000
Contagious diseases of domesticated animals. 1883, 271 pp., octavo.	5,000
Investigation of sorghum as a sugar-producing plant, season of 1882. Peter Collier, chemist. 1883, 68 pp., octavo	2,500
Culture of the Date. By W. G. Klee, of California. 1883, 25 pp., octavo	2,500
Special Report No. 1, Miscellaneous. Address of Hon. George B. Loring before the American Forestry Congress, Saint Paul, Minn., August 8, 1883, 41 pp., octavo	12,000
Bulletin No. 2, second edition, Division of Entomology. Reports of observations on the Rocky Mountain locust and the chinch bug, together with extracts from the correspondence of the division on miscellaneous insects. 1883. 36 pp., octavo	1,000
Bulletin No. 3, Division of Entomology. Reports of observations and experiments in the practical work of the division, made under the direction of the Entomologist. 1883. — pp., octavo	1,200
Third report of the United States Entomological Commission, relating to the Rocky Mountain locust, the western cricket, the army worm, canker worm, and the Hessian fly, together with the descriptions of larvæ of injurious forest insects, studies on the entomological development of the locust and other insects, and on the systematic position of the orthoptera in relation to other orders of insects. With maps and illustrations. 1883. 451 pp., octavo	30,000

FORESTRY DIVISION.

Since the last report from this division was made, the work of ascertaining the facts relative to forestry in our country has been prosecuted as the means at the disposal of the Department would permit. The subject has so lately come up for distinct consideration among us, and the facts are numerous and to be gathered from so many sources and throughout so wide a territory, that for a long time to come the principal work of the division will be the collection of information upon which legislative action and commercial economy can be based. In the month of May last, three special agents were commissioned by the Department for the purpose of making personal examination of the country in respect to its forest condition, and to obtain facts relating to the subject. Reports from some of these have been received. Their report is very encouraging in regard to the practicability of successful tree-planting upon the dry and treeless plains of the Northwest. In the prosecution of our inquiries on the subject of forestry, this division is also discovering in other countries trees specially adapted to growth in arid

regions similar to our own, and methods of culture which can be adopted by us with promise of success. The expectation seems warranted, therefore, that there is no part of the country where, with proper care, such a growth of trees may not be secured as is desirable for the general welfare and for the comfort of the individual settler.

The importance of the work intrusted to the Forestry Division may be underrated through a failure to recognize the extent and value of forest products and their close connection with many of our most important industries. It has been estimated that two-thirds of the imports of Great Britain are of vegetable character, and one-third of forest products proper, amounting in value annually to £100,000,000. The total value of forest products for the census year is estimated at $700,000,000. It is only by comparison with the value of other known products that one can get the meaning of these figures. The largest single product of the country, as given in the Census Report, is that of Indian corn, valued at $679,714,499, though this is admitted to be an overestimate.

Other products are given, as follows:

Wheat	$474,291,850
Hay	371,811,084
Cotton	280,266,242
Rye	18,564,560
Oats	150,243,565
Barley	30,090,742
Buckwheat	8,682,488
Potatoes	81,062,214
Tobacco	36,414,615
Gold	33,379,663
Silver	41,110,957
Coal (bituminous)	52,427,868
Coal (anthracite)	42,110,957
Iron ore	20,470,756
Copper ore	8,886,295
Lead and zinc	4,182,685
Other minerals and irregular coal products	12,399,964
Total product of precious and other minerals	218,385,452

It will be seen on looking at these figures that the products of our forests exceed in value that of our crops of hay, rye, oats, barley, buckwheat, potatoes, and tobacco taken together. They amount to ten times the value of the gold and silver, of which we make so much account, and is more than three times the value of the precious minerals, and the coal and other minerals combined.

ARTESIAN WELLS.

The agent having in charge the locating and sinking of artesian wells reports, under date of October 28, that well No. 1, located 112 miles easterly from Denver upon Government land, on the Burlington and

Missouri Railroad, in Colorado, having been bored to a depth of 1,260 feet, and meeting with difficulties impracticable, if not impossible, to overcome, the work on it was finally abandoned, and a contract was then made with Wellington Smith, esq., an experienced well-driller, of Bradford, Pa., to bore a well near the station of Cheyenne Wells, Colo., on the Kansas Pacific Railroad, to the depth of 2,000 feet, if necessary, for the sum of $10,000. Work on this well was begun about the middle of June, 1883, and has been prosecuted with diligence till the present time. It is now down to a depth of 700 feet, and considering the difficulties encountered and overcome the work is favorably progressing, and it may reasonably be expected that the well will soon be successfully completed.

SEED DIVISION.

In the purchase of seed for distribution I have been careful to buy none but the best and of such varieties as would be of value to the section of country in which distributed. All the seed purchased has been carefully tested before being sent out.

Tabulated statement showing the quantity and kind of seeds issued from the Seed Division, Department of Agriculture, under the general appropriation act of Congress, from July 1, 1882, to June 30, 1883, inclusive.

Description of seeds.		Senators and Members of Congress.	Statistical correspondents.	Miscellaneous applicants.	Grand total.
		Packages.	*Packages.*	*Packages.*	*Packages.*
Vegetables	137	1,597,691	137,751	149,072	1,884,514
Flowers	81	143,556	40,960	48,927	233,440
Herbs	21	.....	72	331	403
Tobacco	6	71,890	291	4,051	76,232
Tree	3	163	454	2,277	2,894
Sunflower	1	.....	52	738	790
Opium poppy	1	.....	.....	13	13
Pyrethrum	2	.....	96	210	306
Grape vine	.....	21,253	.....	.....	21,253
Strawberry	.....	20,653	.....	.....	20,653
Field seeds	.....	.....	.....	.....	.....
Wheat	7	56,780	16,464	3,065	76,309
Oats	3	1,994	4,315	5,335	11,644
Corn	3	11,130	200	1,500	12,830
Barley	1	5	.....	.....	5
Buckwheat	1	408	160	911	1,479
Potatoes	1	1,303	135	261	1,699
Rye	1	.....	.....	57	57
Sorghum	1	1,689	771	2,112	4,572
Turnip	11	86,148	.....	.....	86,148
Sugar beet	2	.....	43	312	355
Mangel wurzel	2	.....	25	79	104
Grass	5	2,712	1,022	2,212	5,946
Clover	3	149	108	366	623
Cow-pea	1	.....	38	30	68
Artichoke	1	.....	64	544	608
Millet	1	159	48	66	273
Rice	1	.....	26	158	184
Textile	.....	.....	.....	.....	.....
Cotton	5	21,255	175	1,331	22,761
Hemp	2	.....	38	46	84
Flax	1	.....	4	43	47
Jute	1	.....	22	812	834
Ramie	1	.....	.....	102	102
Grand total	.....	2,038,935	203,334	224,961	2,467,23

DISBURSEMENTS.

The following table exhibits in a condensed form the appropriations made by Congress for this Department, the disbursements and unexpended balance for the fiscal year ending June 30, 1883.

Object of appropriation.	Amount appropriated.	Amount disbursed.	Amount unexpended.
Salaries	$102,580 00	$102,575 49	$4 51
Laboratory	6,000 00	6,000 00	.....
Collecting statistics	80,000 00	77,424 80	2,575 20
Purchase and distribution of valuable seeds	80,000 00	80,000 00	.....
Experiments in the culture of tea	5,000 00	3,905 66	1,094 34
Experiments in the manufacture of sugar	*28,354 60	28,180 12	174 48
Experimental garden	7,500 00	7,500 00	.....
Museum	1,000 00	1,000 00	.....
Furniture, cases, and repairs	6,700 00	6,700 00	.....
Library	1,500 00	1,476 82	23 18
Investigating the history, &c., of insects	20,000 00	20,000 00	.....
Examination of wools and animal fibers	10,000 00	7,962 94	2,037 06
Investigating the diseases of swine, &c	25,000 00	20,441 63	4,558 37
Reclamation of arid and waste lands	*20,085 26	12,429 13	7,656 13
Report on forestry	10,000 00	8,361 19	1,638 81
Postage	4,000 00	3,977 49	22 51
Contingent expenses	15,000 00	14,865 13	134 87
Improvement of grounds	8,000 00	7,941 62	58 38
Transporting and care of Atlanta exhibit	5,000 00	4,937 41	62 59
Erecting building for seed division	25,000 00	25,000 00	.....
Printing and binding	15,000 00	15,000 00	.....

*Including unexpended balance of appropriation for 1882.

There are a number of bills to be paid from the above balances which have not yet been presented for settlement.

Very respectfully,

GEO. B. LORING,
Commissioner of Agriculture.

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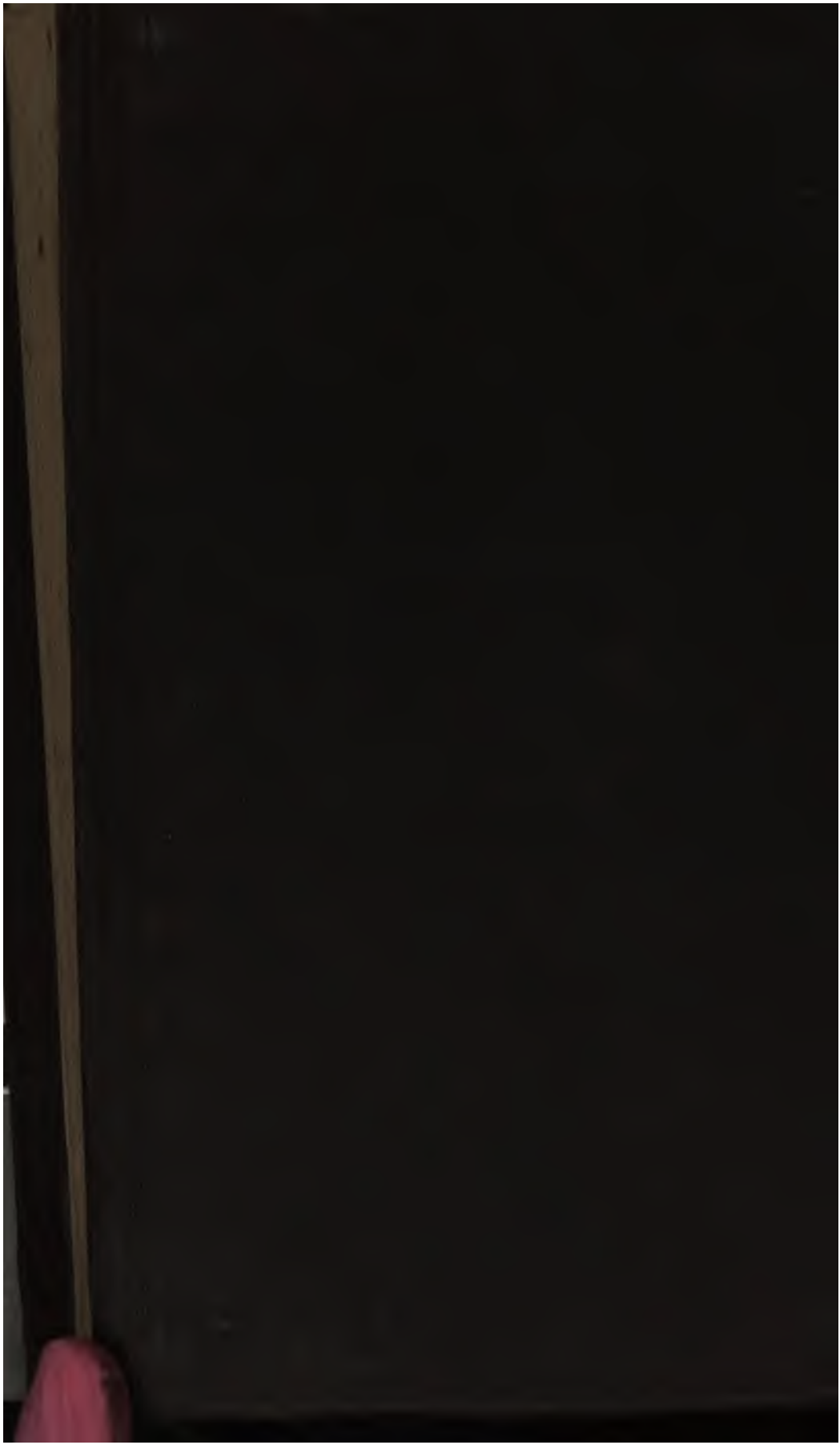
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